

MAL/6800 1.3F: 0000 SDOSEDRIVERS
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IOJUPITER.ASM

*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Jupiter II Hardware Configuration Definitions

```

0000      1: Listdefs equ 0          ; don't list SDOSE definitions
          2: ;
003C      3: memsize equ 60         ; K of memory
8400      4: code equ $8400         ; top of user space
          5: ;
0001      6: VirtualFloppy equ 1     ; Use Virtual (joke) floppy drive
          7: ;
0002      8: PerSci equ 2           ; 1 dual persci
0001      9: WMformat equ 1         ; set up for WM 256 byte format...
0001     10: IBMformat equ 1         ; and IBM 3740 format
          11: ;
0002     12: DAMfloppy equ 2         ; 1 dual DAM floppy drive
          13: ;
0001     14: StorageDemon equ 1      ; Standard Storage Demon
0001     15: IMI7710S equ 1         ; IMI 7710s
0001     16: UseDemonAsClock equ 1   ; Use Demon interface as clock
          17: ;
0800     18: DesiredPoolSize equ 512*4 ; so poolsize is 3 sectors -> readahead happens
          19: ;
0000     20: InBufSize:$ffc4 equ 0   ; line printer doesn't need input buffer
0000     21: LineBufSize:$ffc4 equ 0 ; line printer doesn't need line buffer

```

CPU speed equ \$87
; /100 MHz

for 7711
9382 / 4A38

make D2: the
default disk
8EB1 / 9155

9286+5 / 9377

90E4+5 / 0000

fix BUILDMAP1
85D8 / DE068DEC

fix FOREORE
9E05 / 01

86A5
B7FF82
40
8BFF82
40 8600
46 8880
FFFF82

9DF8 / 7E9E05

make retry count high
85B4 / 30

87D1 / E7
fix SAVEGRISM

fix WDCRESET
8A39 / 86CA
B7FF4C
B6FF41
8612
B7FF4D
B7FF4E
CE1388
09
26FD
86EA

fix end recovery in
floppy driver 9/2/83
87C4 / 36EE2B
A603E604
FE9013
6F3F
7E8EE63F

8EE6 / A740E741
3239

3/8/85 patch
clock need to make
clock: more accurate
9E35 / C628
8639

3/22/85 patch LPT
for 10 second timeout
on EPION
8D78 / 0266
8D9E / 0266

```

0001 2: *****
0001 3: JUPITERII EQU 1 THIS I/O PACKAGE IS FOR A JUPITER II!
0001 4: WAVEMATE EQU 1 IF'S ON THIS SHOULD BE IF'S ON JUPITERII
5: *****
6:
9: NAME SDDSDRIVERS
0001 10: IFUND M6800
0001 11: M6800 EQU 1
0000 12: M6801 EQU 0
0000 13: M6809 EQU 0
14: FIN M6800
15:
0001 16: IF M6800!M6801
17: WITH LINCLUDE
18: FIN.
19:
20: *
21: * BY SOFTWARE DYNAMICS
22: * AND A CAST OF THOUSANDS!
23: *
1231 24: EDITDATE EQU $1231 /B2 MMDD IN HEX FORMAT
1982 25: EDITYEAR EQU $1982
26: *
27: *
28: *****
29: * I/O PACKAGE STRUCTURE
30: * The I/O package is organized in the following fashion:
31: *
32: * Low addresses: !
33: * ! Read-only code, !
34: * ! tables, etc. !
35: * !-----!
36: * !
37: * ! Interrupt poll !
38: * ! chains !
39: * ! (readonly) !
40: * !
41: * !-----!
42: * !
43: * ! Working storage, !
44: * ! DCBs, TCBs, etc. !
45: * !
46: * !-----!
47: * !
48: * ! Disk Buffer !
49: * ! Pool !
50: * ! I/O Driver !
51: * ! Reset code !
52: * ! (once-only) !
53: * !
54: * !-----!
55: * !
56: * ! VT Drivers !
57: * ! SDDS !
58: * ! .... !
```

```
59: *
60: *      To make this arrangement possible, each I/O package source is
61: *      organized in the following way:
62: *          IOxxxxx.DO      is a file containing a configuration
63: *                          for machine xxxxx
64: *          IOxxxxx.DO      is a file containing an I/O package "shell"
65: *          IOyyyyy.ASM     is a file containing ALL driver-related code
66: *                          tables, etc. for the hardware device yyyyy
67: *
68: *      Each I/O package shell uses conditional assembly switches to conditionally
69: *      INCLUDE IOyyyyy.ASM in a particular configuration. The IOyyyyy.ASM
70: *      file is actually INCLUDED 4 times, once for each of the 4 areas of
71: *      the I/O package shown above. The following conditional switches
72: *      are used by the driver source module to distinguish between areas:
73: *          IODRIVERBODY    selects the read-only code portion
74: *          IODRIVERPOLL    selects the Interrupt poll chain portion
75: *          IODRIVERRAM     selects read/write storage of driver
76: *          IODRIVERINIT    selects the once-only I/O driver initializing code
77: *
78: *      Note: the driver source module should define all equates and (DCB)
79: *      table displacements when the conditional switch IODRIVERBODY is enabled.
80: *
81: *
82: *      A Typical shell has the following source form:
83: *
84: *          *      SET DEFAULTS
85: *              IFUND          xxxx
86: *              IFUND          yyyy
87: *              ...
88: *          *      BUILD READ-ONLY CODE
89: *              IODRIVERBODY    SET 1
90: *              IODRIVERPOLL    SET 0
91: *              IODRIVERRAM     SET 0
92: *              IODRIVERINIT    SET 0
93: *              IF              xxxx
94: *              INCLUDE         IOxxxx.ASM
95: *              FIN
96: *              IF              yyyy
97: *              INCLUDE         IOyyyy.ASM
98: *              FIN
99: *              ...
100: *          PATCHSPACE          RTP zzzz
101: *          SW1
102: *          **** Build Interrupt Poll Chains
103: *              IODRIVERBODY    SET 0
104: *              IODRIVERPOLL    SET 1
105: *              IF              xxxx Note: order of poll routines may be different than bodies
106: *              INCLUDE         IOxxxx.ASM
107: *              FIN
108: *              IF              yyyy
109: *              INCLUDE         IOyyyy.ASM
110: *              FIN
111: *              ...
112: *          **** Build Working Storage
113: *              IODRIVERPOLL    SET 0
```

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Jupiter II Hardware Configuration Definitions

```
114: *      IODRIVERRAM          SET 1
115: *      IF                  xxxx
116: *      INCLUDE              IOxxxx.ASM
117: *      FIN
118: *      IF                  xxxx
119: *      IF                  yyyy
120: *      INCLUDE              IOyyyy.ASM
121: *      FIN
122: *      ...
123: *      ***** Build Driver Reset routines
124: *      IODRIVERRAM          SET 0
125: *      IODRIVERINIT        SET 1
126: *      IF                  xxxx
127: *      INCLUDE              IOxxxx.ASM
128: *      FIN
129: *      IF                  yyyy
130: *      INCLUDE              IOyyyy.ASM
131: *      FIN
132: *      ...
133: *      ***** Finish out disk buffer pool, etc
134: *      ...
135: *      END
```

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Jupiter II Hardware Configuration Definitions

```
137: *
FC03      138: INICV   EQU   $FC03      INITIALIZE CONSOLE DEVICE VECTOR
FC06      139: PUTCV   EQU   $FC06      PUT A CHARACTER TO CONSOLE VECTOR
FC09      140: GETCV   EQU   $FC09      GET A CHARACTER TO CONSOLE VECTOR
FC0C      141: TESTCV  EQU   $FC0C      TEST FOR ARRIVAL OF CHARACTER FROM CONSOLE
FC12      142: INIDV   EQU   $FC12      INIT DEFAULT DEVICE (FOR LPT)
FC15      143: PUTDV   EQU   $FC15      PUT A CHARACTER TO DEFAULT DEVICE VECTOR
144:
00FE      145: SYSPB   EQU   $FE
00FD      146: SYSIRQ  EQU   $FD
147:
148:
```

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
I/O PACKAGE DEFAULT SWITCHES

```
0001      150: OUTASPACE      EQU    1 ; USE TRIMMED DEF FILES TO SAVE SYMBOL TABLE SPACE
          151:
0001      152:      IFUND SDOSMT
0000      153: SDOSMT      EQU    0          ; DEFAULT IS "NOT SDOS/MT"
          154:      FIN
          155:
0000      156:      IF    SDOSMT
          169:      FIN    SDOSMT
0000      170:      IFUND MEMSIZE
          172:      FIN    MEMSIZE
          173:
0000      174:      IFUND DESIREDPOOLSIZE
          176:      FIN
          177:
0001      178:      IFUND NIOCHANNELS
0000      179:      IF    SDOSMT
          181:      ELSE
0008      182: NIOCHANNELS      EQU          8
          183:      FIN
          184:      FIN    NIOCHANNELS
          185:
          186: *
0400      187: K      EQU    1024          # BYTES PER "K" OF MEMORY
          188: *
0001      189:      IF    M6800!M6801
0000      190:      IFUND CODE
          196:      FIN    CODE
          197: *
0001      198:      IFUND SDOS
BE00      199: SDOS      EQU    MEMSIZE!K-#3200
          200:      FIN    SDOS
0001      201:      IFUND VTDRIVER
A600      202: VTDRIVER EQU    SDOS-#1800
          203:      FIN
0001      204:      ELSE (M6809)
          222:      FIN
          223: *
0001      224:      IFUND DRIVERBASE
0001      225:      IF    CODE<<SDOS
B400      226: DRIVERBASE EQU          CODE
0002      227:      ELSE
          229:      FIN    CODE<<SDOS
          230:      FIN    DRIVERBASE
          231:
0001      232:      IFUND REALTIMECLOCK          "THERE EXISTS A REAL PIECE OF CLOCK HARDWARE"
0000      233:      IFUND STORAGEDEMON
          237:      ELSE
0001      238:      IFUND USECONSOLEACIAASCLOCK
0000      239: USECONSOLEACIAASCLOCK      EQU    &STORAGEDEMON
          240:      FIN    USECONSOLEACIAASCLOCK
          241:      FIN    STORAGEDEMON
0001      242: REALTIMECLOCK EQU          &USECONSOLEACIAASCLOCK
          243:      FIN    REALTIMECLOCK
          244:
003C      245: TICKSPERSECOND EQU          60
```

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
I/O PACKAGE DEFAULT SWITCHES

0001	246:	IFUND	CLOCK	
0001	247:	CLOCK	EQU	1
	248:	FIN		
0001	249:	IF	CLOCK	
0001	250:	IFUND	LISTCLOCK	
0001	251:	LISTCLOCK	EQU	1
	252:	FIN		
	253:	FIN		
	254:			
0001	255:	IFUND	BLACKHOLE	
0000	256:	BLACKHOLE	EQU	0
	257:	FIN		
0000	258:	IF	BLACKHOLE	
	262:	FIN		
	263:			
0001	264:	IFUND	SDLP	
0000	265:	SDLP	EQU	0
	266:	FIN		
0000	267:	IF	SDLP	
	271:	FIN		
	272:			
0000	273:	IFUND	VIRTUALFLOPPY	
	275:	FIN	VIRTUALFLOPPY	
0001	276:	IF	VIRTUALFLOPPY	
0001	277:	IFUND	LIST.VIRTUALFLOPPY	
0001	278:	LIST.VIRTUALFLOPPY	EQU	1
	279:	FIN	LISTVIRTUALFLOPPY	
0000	280:	IFUND	PERSCI	
	282:	FIN	PERSCI	
0000	283:	IFUND	DAMFLOPPY	
	285:	FIN	DAMFLOPPY	
0002	286:	IF	PERSCI	
0000	287:	IFUND	WMFORMAT	
	289:	FIN	WMFORMAT	
0000	290:	IFUND	IBMFORMAT	
	292:	FIN	IBMFORMAT	
	293:	FIN	PERSCI	
	294:	FIN	VIRTUALFLOPPY	
0001	295:	IFUND	WMPERSCI	
0000	296:	WMPERSCI	EQU	0
	297:	FIN		
0000	298:	IF	WMPERSCI	
	305:	FIN	WMPERSCI	
0001	306:	IFUND	WMDAMFLOPPY	
0000	307:	WMDAMFLOPPY	EQU	0
	308:	FIN	WMDAMFLOPPY	
0000	309:	IF	WMDAMFLOPPY	
	320:	FIN	WMDAMFLOPPY	
	321:			
0000	322:	IFUND	STORAGEDEMON	
	324:	FIN		
0001	325:	IF	STORAGEDEMON	
0001	326:	IFUND	LISTSTORAGEDEMON	
0001	327:	LISTSTORAGEDEMON		EQU 1
	328:	FIN		

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
I/O PACKAGE DEFAULT SWITCHES

329: FIN
330:
0000 331: IFUND LISTDEFS
333: FIN
0001 334: IOPKDEFS EQU 1

MAKE SURE WE GET I/O PACKAGE DEFINITIONS

MAL/6800 1.3F: 04D0 SDOSDRIVERS
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IOJUPITER.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Virtual Terminal Driver definitions

```

344: *
345: *      SDOS-TO-IOPACKAGE COMMUNICATION REGION
346: *
BE01 347:      ORG      SDOS+1
348: ****      FCB      $10      SDOS VERSION NUMBER
349:      FDB      0      LAST ERROR ENCOUNTERED
BE03 BEB1 350:      FDB      CNFGTABLE      TELL SDOS WHERE ALL THE GOODIES ARE
BE05 0000 351:      FDB      0      SERIAL NUMBER
BE07 0000 352:      FDB      0      IOBLOCKPTR
BE09 0000 353:      FDB      0      IOCB POINTER (FOR FILE-TYPE DEVICE DRIVERS)
BE0B 000000 354:      FCB      0,0,0      SET CLOCK TO "MIDNITE"
BE0E 00 355:      FCB      0      DAY, LET COMMAND INTERPRETER KNOW
BE0F 00 356:      FCB      0      MONTH, THAT THE TIME HASN'T BEEN SET
BE10 82 357:      FCB      EDITYEAR&$FF      YEAR
358: *
8400 359:      ORG      DRIVERBASE
8400 7E8400 360: SYSCALLIO      JMP      SYSCALLIO SDOS SETS JMP ADDR TO ITS ENTRY POINT
361:
8403 1231 362:      FDB      EDITDATE      RECORD I/O PACKAGE DATE IN OBJECT FILE
8405 1982 363:      FDB      EDITYEAR
364:
365: *
366: ****      READ ONLY CODE SECTION
0001 367: IODRIVERBODY      SET      1
0000 368: IODRIVERPOLL      SET      0
0000 369: IODRIVERRAM      SET      0
0000 370: IODRIVERINIT      SET      0
371:
372: *
0000 373: NEXTTCB      SET      0      END OF TCB CHAIN
0000 374: NEXTTIMEOUT      SET      0
0000 375: NEXTDISKDCB      SET      0
0000 376: NEXTDEVIDECB      SET      0
0000 377: NTIMEOUTS      SET      0
0000 378: NDISKDCBS      SET      0
BE15 379: INTERRUPTTARGET      SET SDOS+SDOS:RTI ASSUME CONVENTIONAL INTERRUPT SCHEME
```

MAL/6800 1.3F: 8405 SDO5DRIVERS *** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 10; Form 1 INTERFACE TO IDB
IOJUPITER.ASM

```
0001      381:      IF      M6800
8407      382: DEBUGSYSCALLHANDLER
8407 34    383:      DES                MAKE SPACE FOR X
8408 34    384:      DES                MAKE ROOM FOR INDEX REGISTER
8409 34    385:      DES                MAKE ROOM FOR CONTENTS OF (A)
840A 34    386:      DES                SAVE ACCB
840B 07    387:      TPA
840C 36    388:      PSHA                .SAVE CC BITS
840D 8DBEC4 389:      JSR      INTDISABLE    TURN OFF INTERRUPTS
      8410    390: DEBUGINTERRUPT ; ^D: CONTEXT BLOCK IS ON TOP OF STACK
8410 FEFFFC 391:      LDX      $FFFC                ; NMI VECTOR
8413 6E00   392:      JMP      0,X
      0001    393:      ELSE      (M6809)
      0001    399:      FIN      M6800
      0001    400:      IF      CLOCK
      0001    401:      INCLUDE      IOCLOCK.ASM
      0001      1:      IF      IOCDRIVERBODY
```

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IOCLOCK.ASM

*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

8415 842F	3: CLOCKDRIVER	FDB	CLOCKOPEN	
8417 842F	4:	FDB	CLOCKCLOSE	
8419 848D	5:	FDB	CLOCKREADA	
841B 8EDB	6:	FDB	ILLDEVICEOP	WRITEA IS A NO-NO
841D 8469	7:	FDB	CLOCKREADB	
841F 844B	8:	FDB	CLOCKWRITEB	
8421 8EDB	9:	FDB	ILLDEVICEOP	YOU UPDATE THE CLOCK, NOT REBUILD IT (CREATE)
8423 8EDB	10:	FDB	ILLDEVICEOP	RENAME IT TO WHAT? CLOCK-RADIO: ???
8425 8EDB	11:	FDB	ILLDEVICEOP	YOU CAN'T GET RID OF THE CLOCK, NEITHER
8427 8EDB	12:	FDB	ILLDEVICEOP	NO CONTROL FUNCTIONS
8429 8434	13:	FDB	CLOCKSTATUS	SAY "I'M A CLOCK, TICK-TOCK"
842B 9E35	14:	FDB	CLOCKRESET	
842D 842F	15:	FDB	CLOCKPFRESTART	WHO UNPLUGGED ME???
	16: *			
842F	17: CLOCKCLOSE	EQU	*	WHAT AM I SUPPOSED TO DO, PUT THE CLOCK AWAY??
842F	18: CLOCKOPEN	EQU	*	HOW ABOUT LOOKING AT YOUR \$9 TI CHEAPIE, MAC!
842F	19: CLOCKPFRESTART	EQU	*	AM I SUPPOSED TO KEEP TIME WITH NO POWER???
842F 0C39	20:	OKRTS		TOUGH!
	21:			
	22: *			
8431 7E8EDB	23: CLOCKSPRUNG	JMP	ILLDEVICEOP	
	24:			
8434 8104	25: CLOCKSTATUS	CMPA	#SC:GETTYPE	
8436 26F9	26:	BNE	CLOCKSPRUNG	
8438 FE8E07	27:	LDX	SDOS+SDOS:IOBLOCKPTR	
843B BDBE36	28:	JSR	SDOS+SDOS:CHECKRDLEN	HAS HE GOT A BYTE SPACE
843E 0001	29:	FDB	1	
8440 EE0A	30:	LDX	SCBLK:RDBUF,X	GET THE BUFFER POINTER
8442 860B	31:	LDAA	#DVTYP.CLOCK	I'M ALIVE AND TICKING (HOPEFULLY!)
8444 A700	32:	STAA	DVTYP:TYPE,X	
8446 0C39	33:	OKRTS		
	34:			
8448 BDBE39	35: CLOCKWRITB	JSR	SDOS+SDOS:CHECKWRLEN	HAS HE GOT 6 BYTES?
844B 0006	36:	FDB	6	
844D EE04	37:	LDX	SCBLK:WRBUF,X	WRITE BUFFER POINTER
844F C606	38:	LDAB	#6	
8451 A600	39: CLOCKWB1	LDAA	0,X	
8453 0B	40:	INX		
8454 36	41:	PSHA		
8455 5A	42:	DECB		
8456 26F9	43:	BNE	CLOCKWB1	
845B 01	44:	NOP		DON'T WANT TO UPDATE THE CLOCK WHILE SETTING IT
8459 0F	45:	SEI		
845A CE8E00	46:	LDX	#SDOS	
845D C606	47:	LDAB	#6	
845F 32	48: CLOCKWB2	PULA		
8460 A710	49:	STAA	SDOS:CLOCK+5,X	
8462 09	50:	DEX		
8463 5A	51:	DECB		
8464 26F9	52:	BNE	CLOCKWB2	
8466 0E	53:	CLI		
8467 0C39	54:	OKRTS		AND WE'S DONE!
	55: *			
	56: *			
	57: *			

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IDCLOCK.ASM

*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

8469 BDBE36	58: CLOCKREADB	JSR	SDOS+SDOS:CHECKRDLEN
846C 0006	59:	FDB	6 HE BETTER HAVE 6 BYTES AT LEAST
846E 01	60:	NOP	DON'T WANT CLOCK UPDATED WHILE READING IT
846F 0F	61:	SEI	
8470 CEBE00	62:	LDX	#SDOS
8473 C606	63:	LDAB	#6
8475 A60B	64: CLOCKRB1	LDAA	SDOS:CLOCK,X
8477 08	65:	INX	
8478 36	66:	PSHA	
8479 5A	67:	DECB	
847A 26F9	68:	BNE	CLOCKRB1
847C 0E	69:	CLI	
847D FEBE07	70:	LDX	SDOS+SDOS:IOBLOCKPTR
8480 EE0A	71:	LDX	SCBLK:RDBUF,X
8482 C606	72:	LDAB	#6
8484 32	73: CLOCKRB2	PULA	
8485 A705	74:	STAA	5,X
8487 09	75:	DEX	
8488 5A	76:	DECB	
8489 26F9	77:	BNE	CLOCKRB2
848B 0C39	78:	OKRTS	

79: *
80: *
81: *

848D BDBE36	82: CLOCKREADA	JSR	SDOS+SDOS:CHECKRDLEN
8490 0011	83:	FDB	17 ENOUGH FOR HH:MM:SS MM/DD/YY
8492 BD25	84:	BSR	CLOCKGETTD GET TIME, DATE FROM SDOS
8494 BD41	85:	BSR	CLOCKDATE FORMAT DATE
8496 BD72	86:	BSR	CLOCKTIME FORMAT TIME
8498 FEBE07	87:	LDX	SDOS+SDOS:IOBLOCKPTR
849B 8611	88:	LDAA	#17
849D A709	89:	STAA	SCBLK:RPLEN+1,X
849F EE0A	90:	LDX	SCBLK:RDBUF,X
84A1 DF00	91:	STX	TEMPX
84A3 CE9002	92:	LDX	#TIME#
84A6 E600	93: CLOCKRA1	LDAB	0,X
84A8 08	94:	INX	
84A9 DF02	95:	STX	TEMPX+2
84AB DE00	96:	LDX	TEMPX
84AD E700	97:	STAB	0,X
84AF 08	98:	INX	
84B0 DF00	99:	STX	TEMPX
84B2 DE02	100:	LDX	TEMPX+2
84B4 4A	101:	DECA	
84B5 26EF	102:	BNE	CLOCKRA1
84B7 0C39	103:	OKRTS	

104: *
105: *
106: *

84B9	107: CLOCKGETTD		
84B9 01	108:	NOP	
84BA 0F	109:	SEI	
84BB CEBE00	110:	LDX	#SDOS
84BE C606	111:	LDAB	#6
84C0 A60B	112: CLOCKGETTD1	LDAA	SDOS:CLOCK,X

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*** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

84C2 08	113:	INX	
84C3 36	114:	PSHA	
84C4 5A	115:	DECB	
84C5 26F9	116:	BNE	CLOCKGETTD1
84C7 0E	117:	CLI	
84C8 CE8FF4	118:	LDX	#CLOCKBUFFER
84C8 C606	119:	LDAB	#6
84CD 32	120: CLOCKGETTD2	PULA	
84CE A705	121:	STAA	5,X
84D0 09	122:	DEX	
84D1 5A	123:	DECB	
84D2 26F9	124:	BNE	CLOCKGETTD2
84D4 39	125:	RTS	
	126: *		
	127: *		
	128: *		
84D5 8DE2	129: DATE	BSR	CLOCKGETTD
84D7 B68FF8	130: CLOCKDATE	LDAA	MONTH
84DA 8D22	131:	BSR	BCDTOASC
84DC B7900B	132:	STAA	DATE\$:MONTH
84DF F7900C	133:	STAB	DATE\$:MONTH+1
84E2 B68FF7	134:	LDAA	DAY
84E5 8D17	135:	BSR	BCDTOASC
84E7 B7900E	136:	STAA	DATE\$:DAY
84EA F7900F	137:	STAB	DATE\$:DAY+1
84ED B68FF9	138:	LDAA	YEAR
84F0 8D0C	139:	BSR	BCDTOASC
84F2 B79011	140:	STAA	DATE\$:YEAR
84F5 F79012	141:	STAB	DATE\$:YEAR+1
84F8 CE900B	142:	LDX	#DATE\$
84FB 8608	143:	LDAA	#8
84FD 39	144:	RTS	
	145: *		
84FE 16	146: BCDTOASC	TAB	
84FF C40F	147:	ANDB	##F
8501 CB30	148:	ADDB	#'0
8503 44	149:	LSRA	
8504 44	150:	LSRA	
8505 44	151:	LSRA	
8506 44	152:	LSRA	
8507 8B30	153:	ADDA	#'0
8509 39	154:	RTS	
	155: *		
	156: *		
850A BD852E	157: CLOCKTIME	JSR	DIVIDEBY60 NOW DIVIDEND HAS SECONDS
850D CE900B	158:	LDX	#TIME\$:SECONDS
8510 8D10	159:	BSR	CLOCKMAKEXX
8512 CE9005	160:	LDX	#TIME\$:MINUTES
8515 8D0B	161:	BSR	CLOCKMAKEXX
8517 CE9002	162:	LDX	#TIME\$:HOURS
851A 8D06	163:	BSR	CLOCKMAKEXX
851C CE9002	164:	LDX	#TIME\$
851F 8608	165:	LDAA	#8
8521 39	166:	RTS	
	167: *		

MAL/6800 1.3F: 8522 SDO5DRIVERS
01/14/83 11:39:33; Page 14; Form 1
IOCLOCK.ASM

*** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

```

8522 BD852E    168: CLOCKMAKEXX    JSR    DIVIDEBY60
8525 8B30      169:                ADDA    #'0
8527 CB30      170:                ADDB    #'0
8529 E700      171:                STAB    0,X
852B A701      172:                STAA    1,X
852D 39        173:                RTS
                174: *
                175: *                DIVIDE BY 60 -- DIVIDE 3 BYTE "DIV60DIVIDEND" BY 60
                176: *                DIVIDEND:=DIVIDEND/60
                177: *                (A):=REMAINDER MOD 10
                178: *                (B):=INT(REMAINDER/10)
852E          179: DIVIDEBY60      EQU     *
852E C619      180:                LDAB    #3*8+1        NUMBER OF BITS
8530 4F        181:                CLRA
8531          182: DIVIDE60L      EQU     *
8531 49        183:                ROLA
8532 813C      184:                CMPA    #60
8534 2504      185:                BCS     DIVIDE60L2
8536 803C      186:                SUBA    #60
8538 0D        187:                SEC
8539 85        188:                #85                SKIP THE NEXT INSTRUCTION
853A 0C        189: DIVIDE60L2      CLC
853B 798FF6    190:                ROL     DIV60DIVIDEND+2
853E 798FF5    191:                ROL     DIV60DIVIDEND+1
8541 798FF4    192:                ROL     DIV60DIVIDEND+0
8544 5A        193:                DECB
8545 26EA      194:                BNE     DIVIDE60L
8547 C6FF      195:                LDAB    #-1
8549 5C        196: DIVIDE60L3      INCB
854A 800A      197:                SUBA    #10
854C 24FB      198:                BCC     DIVIDE60L3
854E 8B0A      199:                ADDA    #10
8550 39        200:                RTS
                201:                FIN     IO DRIVER BODY
0000          202:                IF      IO DRIVER RAM
                228:                FIN     IO DRIVER RAM
                229:
                230:
                402:                FIN
0000          403:                IF      BLACKHOLE
                405:                FIN     BLACKHOLE
0000          406:                IF      SDLP
                408:                FIN     SDLP
0001          409:                IF      VIRTUALFLOPPY
                410:                INCLUDE          IOVFD.ASM
0001          1:                IF      IO DRIVER BODY
                2: *                PHYSICAL DISK DRIVERS STORAGE "DEFS"
                3:
8551          4: ::                SET     *
0042          5:                ORG     DSKINFO:SIZE
                6:
                7: *                TACKS ON TO BOTTOM OF DISK INFO TABLE
                8:
0042 0001      9: F0READWRITE    RMB     1                0 IS READ, (>0 IS WRITE
0043 0001     10: FDDSTATEJ    RMB     1                JMP instruction

```

MAL/6800 1.3F: 0044 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 15; Form 1 *** CLOCK: DRIVER ***

IDVFD.ASM

0044 0002	11: FDDSTATE	RMB	2	address for JMP instruction
0046 0001	12: FDSEEKRETRY	RMB	1	NUMBER OF RE-SEEKS
0047 0001	13: FDRETRY	RMB	1	READ/WRITE RETRY COUNT
0048 0001	14: FDDRIVE	RMB	1	DRIVE NUMBER TO USE
0049 0001	15: FDCYL	RMB	1	what track we're on (-1 if lost)
004A 0001	16: FDSECTOR	RMB	1	GIMME THIS ONE
004B 0001	17: FDCOMPLEMENT	RMB	1	COMPLEMENT DATA
004C 0001	18: FDFIRSTSEC	RMB	1	FIRST SECTOR ON TRACK
004D 0002	19: FDHEADCHAIN	RMB	2	head of shared-head queue
004F 0002	20: FDNEXTCHAIN	RMB	2	next on shared-head queue
0051 0002	21: FDCCB	RMB	2	address of controller table
0053 0002	22: FDMAPALG	RMB	2	current map algorithm
0055 0001	23: FDK1MODNSPT	RMB	1	SPIRALING CONSTANT MOD NSPT
0056 0001	24: FDK2MODNSPT	RMB	1	2*SC MOD NSPT
0057 0001	25: FDK4MODNSPT	RMB	1	4*SC MOD NSPT
0058 0001	26: FDK8MODNSPT	RMB	1	8*SC MOD NSPT
0059 0001	27: FDK16MODNSPT	RMB	1	16*SC MOD NSPT
005A 0001	28: FDK32MODNSPT	RMB	1	32*SC MOD NSPT
005B	29: FDMAP	EQU	*	MAP FOR MAPPING
	30: ; virtual floppy dcb allocates room needed for FDMAP			
005B	31: FDSIZE	EQU	*	

```

33: *           Controller Tables
34:
0000 35:         ORG     0
36:
0000 0001 37: CCB:BUSY      RMB     1      controller is busy
0001 0002 38: CCB:ADDR      RMB     2      controller address
0003 0001 39: CCB:TIMEOUT   RMB     1      seconds before controller times out
0004 0001 40: CCB:DRIVE     RMB     1      drive to access
0005 0001 41: CCB:CYL      RMB     1      cylinder to access on that drive
0006 0001 42: CCB:LASTCYL   RMB     1      last cylinder accessed, that drive
0007 0002 43: CCB:STARTIO   RMB     2      address of STARTIO routine
0009 0003 44: CCB:STATUS    RMB     3      call for status
000C 0003 45: CCB:RESET     RMB     3      call to abort and interrupt
000F 0003 46: CCB:ABORT     RMB     3      call to abort
0012 0003 47: CCB:RESTORE   RMB     3      call to restore drive
0015 0003 48: CCB:SETSEEK   RMB     3      call to set desired drive and track
0018 0003 49: CCB:SEEK     RMB     3      call to initiate seek
001B 0003 50: CCB:READSECTOR RMB     3      call to read sector
001E 0003 51: CCB:WRITESECTOR RMB     3      call to write sector
0021 0003 52: CCB:VERIFYSECTOR RMB     3      call to verify sector just written
0024 0008 53: CCB:TIMEOUTBLK RMB     TIMEOUT:SIZE timeout block for controller
002C 0002 54: CCB:CURRENTDCB RMB     2      address of current DCB
002E 55: CCB:SIZE        EQU     *
8551 56:                 ORG     ::
57:                 FIN     IO DRIVER BODY
0000 58:                 IF     IO DRIVER RAM
127:                 FIN     IO DRIVER RAM
0000 128:                 IF     IO DRIVER INIT
172:                 FIN     IO DRIVER INIT
0001 173:                 IF     IO DRIVER BODY

```


MAL/6800 1.3F: 8551 SDOSDRIVERS
01/14/83 11:39:33; Page 17; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

8551 9DE3	175: FDDRIVER	FDB	FDRESTORE	
8553 856D	176:	FDB	FDREAD	
8555 8569	177:	FDB	FDWRITE	
8557 858F	178:	FDB	FDWAITDONE	
8559 8566	179:	FDB	FDSTATUS	
855B 855D	180:	FDB	FDCONTROL	
	181:			
	182:			
	183: *		FDCONTROL -- CONTROL OPERATION ENTRY POINT FOR SECTOR I/O DRIVER	
	184:			
855D 8111	185: FDCONTROL	CMPA	#CC:DISMOUNTDISK	SINCE SDOS PASSES THIS THRU
855F 2703	186:	BEQ	FDDISMOUNT	B/ ITS A DISMOUNT!
8561 7E8EDB	187:	JMP	ILLDEVICEOP	NOT A LEGAL CONTROL CALL
	188:			
8564 0C39	189: FDDISMOUNT	OKRTS		I'M HAPPY...
	190:			
	191: *		FDSTATUS-- HANDLE STATUS REQUEST	
	192:			
8566	193: FDSTATUS			
8566 7E8EDB	194:	JMP	ILLDEVICEOP	; NO SUCH STATUS AVAILABLE
	195:			

MAL/6800 1.3F: 8566 SDDS DRIVERS
01/14/83 11:39:33; Page 18; Form 1
IDVFD.ASM

*** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

197: * FDREAD/WRITE -- START SINGLE SECTOR TRANSFER

198:

8569 8601	199: FDWRITE	LDAA	#1	
856B 2001	200:	BRA	FDREAD.1	
856D 4F	201: FDREAD	CLRA		
856E BD85AF	202: FDREAD.1	JSR	FDSETUPDRIVE	GO SET UP ALL THE PARAMETERS IN THE DCB
8571 EE51	203:	LDX	FDCCB,X	see if controller is busy
8573 6D00	204:	TST	CCB:BUSY,X	
8575 2603	205:	BNE	FDSTARTID	
8577 BD8E2A	206:	JSR	SDDS+SDDS:WAITEVENT	
857A DE06	207: FDSTARTID	LDX	DCBPOINTER	NOW NOBODY'S USING DRIVE
857C 6F00	208:	CLR	DCB:DONEFLAG,X	KICK INTERRUPT ROUTINE INTO MOTION
857E EE51	209:	LDX	FDCCB,X	point controller table at this DCB
8580 9606	210:	LDAA	DCBPOINTER	
8582 D607	211:	LDAB	DCBPOINTER+1	
8584 A72C	212:	STAA	CCB:CURRENTDCB,X	
8586 E72D	213:	STAB	CCB:CURRENTDCB+1,X	
8588 EE07	214:	LDX	CCB:STARTIQ,X	
858A BD8E24	215:	JSR	SDDS+SDDS:STARTID	
858D 0C39	216:	OKRTS		
	217:			
858F	218: FDWAITDONE			
858F A600	219:	LDAA	DCB:DONEFLAG,X	IS IT DONE?
8591 2605	220:	BNE	FDWAIT1	B/ YES
8593 BD8E2A	221:	JSR	SDDS+SDDS:WAITEVENT	
8596 DE06	222:	LDX	DCBPOINTER	
8598 EE01	223: FDWAIT1	LDX	DCB:LASTERRDR,X	
859A 2703	224:	BEQ	FDWAIT2	B/ NO ERRORS
859C 7E8EE0	225:	JMP	ERRETX	
859F 0C39	226: FDWAIT2	OKRTS		

MAL/6800 1.3F: 859F SDOSDRIVERS
01/14/83 11:39:33; Page 19; Form 1
IDVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

85A1	228:	MODULONSPTB		
85A1 E00C	229:	SUBB	DSKINFO:NSPT+1,X	
85A3 24FC	230:	BCC	MODULONSPTB	
85A5 E80C	231:	ADDB	DSKINFO:NSPT+1,X	
85A7 39	232:	RTS		
	233:			
85A8	234:	MODULONSPT		
85A8 A00C	235:	SUBA	DSKINFO:NSPT+1,X	
85AA 24FC	236:	BCC	MODULONSPT	
85AC AB0C	237:	ADDA	DSKINFO:NSPT+1,X	
85AE 39	238:	RTS		
	239:			
	240:	*	FDSETUPDRIVE -- SETS UP FDRIVE TABLE FOR INTERRUPT DRIVEN TRANSFER	
	241:			
85AF	242:	FDSETUPDRIVE		
85AF DE06	243:	LDX	DCBPOINTER	
85B1 A742	244:	STAA	FDREADWRITE,X	SAVE THE READ/WRITE FLAG
85B3 C60A	245:	LDAB	#10	
85B5 E747	246:	STAB	FDRETRY,X	SAVE THE READ/WRITE RETRY COUNT
85B7 8604	247:	LDAA	#4	SETUP SEEK RETRY COUNT
85B9 A746	248:	STAA	FDSEEKRETRY,X	
85BB 6F01	249:	CLR	DCB:LASTERROR,X	"NO ERRORS"
85BD 6F02	250:	CLR	DCB:LASTERROR+1,X	
85BF E616	251:	LDAB	DSKINFO:MAPALGORITHM,X	
85C1 A617	252:	LDAA	DSKINFO:MAPALGORITHM+1,X	
85C3 E153	253:	CMPB	FDMAPALG,X	
85C5 2604	254:	BNE	FDSETUP1	B/ MAP HAS CHANGED
85C7 A154	255:	CMPA	FDMAPALG+1,X	
85C9 2742	256:	BEQ	FDSETUP2	B/ MAP HAS NOT CHANGED
85CB E753	257:	FDSETUP1 STAB	FDMAPALG,X	
85CD A754	258:	STAA	FDMAPALG+1,X	
	259:			
85CF DF00	260:	BUILDMAP STX	TEMPX	
85D1 40	261:	NEGA		
85D2 E60C	262:	LDAB	DSKINFO:NSPT+1,X	NUMBER OF TIMES TO DO THIS
85D4 DE06	263:	BUILDMAP1 LDX	DCBPOINTER	
85D6 AB17	264:	ADDA	DSKINFO:MAPALGORITHM+1,X	
85D8 DE06	265:	BUILDMAP2 BSR	MODULONSPT	
85DA DE06	266:	LDX	DCBPOINTER	SEE IF THIS SECTOR NUMBER ALREADY USED
85DC 09	267:	DEX		
85DD 08	268:	BUILDMAP3 INX		
85DE 9C00	269:	CPX	TEMPX	
85E0 2707	270:	BEQ	BUILDMAP4	B/ NOT USED, USE IT
85E2 A15B	271:	CMPA	FDMAP,X	
85E4 26F7	272:	BNE	BUILDMAP3	B/ IT'S NOT THIS ONE, KEEP LOOKING OH WELL, LET'S BUMP IT AND TRY AGAIN
85E6 4C	273:	INCA		
85E7 20EF	274:	BRA	BUILDMAP2	
85E9 A75B	275:	BUILDMAP4 STAA	FDMAP,X	
85EB 08	276:	INX		
85EC DF00	277:	STX	TEMPX	
85EE 5A	278:	DECB		ARE WE DONE BUILDING THE MAP?
85EF 26E3	279:	BNE	BUILDMAP1	B/ NOPE
	280:			
	281:	*	BUILD UP THE SPIRALING INFO	
	282:			

Page

MAL/6800 1.3F: 85F1 SDOSDRIVERS
01/14/83 11:39:33; Page 20; Form 1
IDVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

85F1 DE06	283:	LDX	DCBP0INTER
85F3 A653	284:	LDAA	FDHAPALG,X
85F5 8DB1	285:	BSR	MODULONSPT
85F7 A755	286:	STAA	FDK1MODNSPT,X
85F9 48	287:	ASLA	
85FA 8DAC	288:	BSR	MODULONSPT
85FC A756	289:	STAA	FDK2MODNSPT,X
85FE 48	290:	ASLA	
85FF 8DA7	291:	BSR	MODULONSPT
8601 A757	292:	STAA	FDK4MODNSPT,X
8603 48	293:	ASLA	
8604 8DA2	294:	BSR	MODULONSPT
8606 A758	295:	STAA	FDK8MODNSPT,X
8608 48	296:	ASLA	
8609 8D9D	297:	BSR	MODULONSPT
860B A759	298:	STAA	FDK16MODNSPT,X

MAL/6800 1.3F: 860B SDOSDRIVERS
01/14/83 11:39:33; Page 21; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

```
860D      300: FDSETUP2 ; COMPUTE TARGET CYLINDER AND SECTOR
860D EE2B  301:      LDX      DSKINFO:SECTORDB,X
860F A603  302:      LDAA     RDSI:LSN+1,X      GET LSN
8611 E604  303:      LDAB     RDSI:LSN+2,X
8613 DE06  304:      LDX      DCBPINTER      SO WE CAN POKE AT DCB AGAIN
          305: ;
          306: ; Now generate 8 quotient bits (enough for 255 tracks!)
          307: ;
8615 58    308:      ASLB                      it takes 8 ASLB's to shift sector
8616 49    309:      ROLA                      number into upper byte
8617 A00C  310:      SUBA      DSKINFO:NSPT+1,X  Compute quotient bit
8619 2402  311:      BCC      #+4              b/ did go in, quotient bit is 1
861B AB0C  312:      ADDA     DSKINFO:NSPT+1,X  didn't go in, quotient bit is zero
861D 694A  313:      ROL      FDSECTOR,X      save complement of quotient bit
861F 58    314:      ASLB                      double the dividend
8620 49    315:      ROLA
          316:
8621 A00C  317:      SUBA      DSKINFO:NSPT+1,X  Compute quotient bit
8623 2402  318:      BCC      #+4              b/ did go in, quotient bit is 1
8625 AB0C  319:      ADDA     DSKINFO:NSPT+1,X  didn't go in, quotient bit is zero
8627 694A  320:      ROL      FDSECTOR,X      save complement of quotient bit
8629 58    321:      ASLB                      double the dividend
862A 49    322:      ROLA
          323:
862B A00C  324:      SUBA      DSKINFO:NSPT+1,X  Compute quotient bit
862D 2402  325:      BCC      #+4              b/ did go in, quotient bit is 1
862F AB0C  326:      ADDA     DSKINFO:NSPT+1,X  didn't go in, quotient bit is zero
8631 694A  327:      ROL      FDSECTOR,X      save complement of quotient bit
8633 58    328:      ASLB                      double the dividend
8634 49    329:      ROLA
          330:
8635 A00C  331:      SUBA      DSKINFO:NSPT+1,X  Compute quotient bit
8637 2402  332:      BCC      #+4              b/ did go in, quotient bit is 1
8639 AB0C  333:      ADDA     DSKINFO:NSPT+1,X  didn't go in, quotient bit is zero
863B 694A  334:      ROL      FDSECTOR,X      save complement of quotient bit
863D 58    335:      ASLB                      double the dividend
863E 49    336:      ROLA
          337:
863F A00C  338:      SUBA      DSKINFO:NSPT+1,X  Compute quotient bit
8641 2402  339:      BCC      #+4              b/ did go in, quotient bit is 1
8643 AB0C  340:      ADDA     DSKINFO:NSPT+1,X  didn't go in, quotient bit is zero
8645 694A  341:      ROL      FDSECTOR,X      save complement of quotient bit
8647 58    342:      ASLB                      double the dividend
8648 49    343:      ROLA
          344:
8649 A00C  345:      SUBA      DSKINFO:NSPT+1,X  Compute quotient bit
864B 2402  346:      BCC      #+4              b/ did go in, quotient bit is 1
864D AB0C  347:      ADDA     DSKINFO:NSPT+1,X  didn't go in, quotient bit is zero
864F 694A  348:      ROL      FDSECTOR,X      save complement of quotient bit
8651 58    349:      ASLB                      double the dividend
8652 49    350:      ROLA
          351:
8653 A00C  352:      SUBA      DSKINFO:NSPT+1,X  Compute quotient bit
8655 2402  353:      BCC      #+4              b/ did go in, quotient bit is 1
8657 AB0C  354:      ADDA     DSKINFO:NSPT+1,X  didn't go in, quotient bit is zero
```

X

MAL/6800 1.3F: 8659 SDOSDRIVERS
01/14/83 11:39:33; Page 22; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

8659 694A	355:	ROL	FDSECTOR,X	save complement of quotient bit
865B 58	356:	ASLB		double the dividend
865C 49	357:	ROLA		
	358:			
865D A00C	359:	SUBA	DSKINFO:NSPT+1,X	Compute quotient bit
865F 2402	360:	BCC	#+4	b/ did go in, quotient bit is 1
8661 AB0C	361:	ADDA	DSKINFO:NSPT+1,X	didn't go in, quotient bit is zero
8663 694A	362:	ROL	FDSECTOR,X	save complement of quotient bit
	363: ;	ASLB		double the dividend
	364: ;	ROLA		
	365:			
8665 E64A	366:	LDAB	FDSECTOR,X	get complement of desired track
8667 53	367:	COMB		invert the inverted quotient bits
8668 A74A	368:	STAA	FDSECTOR,X	save sector within track
866A EE2B	369:	LDX	DSKINFO:SECTORDB,X	now save cylinder number in RDSI
866C 6F11	370:	CLR	RDSI:CYLINDER,X	
866E E712	371:	STAB	RDSI:CYLINDER+1,X	
8670 6F0D	372:	CLR	RDSI:SECTOR,X	
8672 6F0E	373:	CLR	RDSI:SECTOR+1,X	
8674 DE06	374:	LDX	DCBPDPINTER	

MAL/6800 1.3F: 8676 SDOSDRIVERS
01/14/83 11:39:33; Page 23; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

8676 EE53	376:	LDX	FDMAPALG,X	apply mapalgorithm...
8678 8C0001	377:	CPX	#0001	unless it is :0001
867B 2734	378:	BED	FDSETUP4	B/ map algorithm :0001, all done!
867D 9B07	379:	ADDA	DCBP0INTER+1	
867F 9701	380:	STAA	TEMPX+1	
8681 9606	381:	LDAA	DCBP0INTER	
8683 8900	382:	ADCA	#0	
8685 9700	383:	STAA	TEMPX	
8687 4F	384:	CLRA		make spiral in (A)
8688 DE06	385:	LDX	DCBP0INTER	assert: cylinder number in (B)
868A BD85A1	386:	JSR	MODULONSPTB	
868D 57	387:	ASRB		
868E 2402	388:	BCC	MAP1	
8690 AB55	389:	ADDA	FDK1MODNSPT,X	
8692 57	390: MAP1	ASRB		
8693 2402	391:	BCC	MAP2	
8695 AB56	392:	ADDA	FDK2MODNSPT,X	
8697 57	393: MAP2	ASRB		
8698 2402	394:	BCC	MAP3	
869A AB57	395:	ADDA	FDK4MODNSPT,X	
869C 57	396: MAP3	ASRB		
869D 2402	397:	BCC	MAP4	
869F AB58	398:	ADDA	FDK8MODNSPT,X	
86A1 57	399: MAP4	ASRB		
86A2 2402	400:	BCC	MAP5	
86A4 AB59	401:	ADDA	FDK16MODNSPT,X	
86A6 DE00	402: MAP5	LDX	TEMPX	
86A8 AB5B	403:	ADDA	FDMAP,X	
86AA DE06	404:	LDX	DCBP0INTER	
86AC BD85AB	405:	JSR	MODULONSPT	
86AF A74A	406:	STAA	FDSECTOR,X	
86B1	407: FDSETUP4			
86B1 DE06	408:	LDX	DCBP0INTER	
86B3 0C39	409:	OKRTS		
	410:	FIN	IODRIVERBODY	
0000	411:	IF	IODRIVERPOLL	
	434:	FIN	IODRIVERPOLL	
0001	435:	IF	IODRIVERBODY	
86B5	436:	DISKINTERRUPT	; entered with CCB address in (X)	
86B5 8D02	437:	BSR	DISKINTSETUP	set up a working context area
86B7 6E43	438:	JMP	FDDSTATEJ,X	resume process waiting for interrupt

NAL/6800 1.3F: 86B7 SDOSDRIVERS
01/14/83 11:39:33; Page 24; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

```

86B9          440: DISKINTSETUP      ; set up a context area of sorts
86B9 FF9015   441:      STX      DISKINTCCB.      remember interface table address
86BC EE2C     442:      LDX      CCB:CURRENTDCB,X
86BE FF9013   443:      STX      DISKINTDCB
86C1 39       444:      RTS
              445:
0002          446:      IF      PERSCI
86C2          447: DISKINTSTARTPERSCI      ; ASSERT: INTERRUPTS ARE DISABLED HERE!
86C2 CE9017   448:      LDX      #CCB:PERSCI
0002          449:      IF      DAMFLOPPY
86C5 2003     450:      BRA      DISKINTSTART
              451:
              452:      FIN      DAMFLOPPY
              453:      FIN      PERSCI
0002          454:      IF      DAMFLOPPY
86C7          455: DISKINTSTARTDAMFLOPPY      ; ASSERT: INTERRUPTS ARE DISABLED HERE!
86C7 CE9045   456:      LDX      #CCB:DAMFLOPPY
              457:      FIN      DAMFLOPPY
86CA          458: DISKINTSTART
86CA 6F00     459:      CLR      CCB:BUSY,X      mark controller busy
              460:      CLI      (allow interrupts)
86CC 8606     461:      LDAA     #6      Set up for 6 1-second interrupts
86CE A703     462:      STAA     CCB:TIMEOUT,X      to keep disk spinning
86D0 8600     463:      LDAA     #(1*TICKSPERSECOND+NTIMEOUTBLOCKS)/256
86D2 C645     464:      LDAB     #(1*TICKSPERSECOND+NTIMEOUTBLOCKS)&$$FF
86D4 A726     465:      STAA     CCB:TIMEOUTBLK+TIMEOUT:FUSE,X
86D6 E727     466:      STAB     CCB:TIMEOUTBLK+TIMEOUT:FUSE+1,X
86D8 8DDF     467:      BSR      DISKINTSETUP      set up a working context area
86DA A642     468:      LDAA     FDREADWRITE,X      a write to an IBM format disk
86DC 2707     469:      BEQ      SEEK      must have the data complemented
86DE 6D4B     470:      TST      FDCOMPLEMENT,X      before it is written
86E0 2703     471:      BEQ      SEEK      (and complemented back, after
86E2 BD87FB   472:      JSR      DISKCOMPLEMENT      it has been written)
```


MAL/6800 1.3F: 86E2 SDOSDRIVERS
01/14/83 11:39:33; Page 25; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

```
474: * See if the head must be moved with a seek operation;
475: * if it must, the seek is done without verification, as a seek
476: * failure will be picked up by a subsequent read/write as
477: * "record not found" status, for which the remedy will be
478: * a restore operation. The restore operation IS verified; if
479: * it fails, a "seek error" is registered, and the restore is
480: * retried, up to the seek-retry count.
481: *
482: *
86E5 FE9015 483: SEEK LDX DISKINTCCB announce intentions
86E8 AD15 484: JSR CCB:SETSEEK,X
86EA 2412 485: BCC SEEKDONE B/ no seek necessary
86EC C1FF 486: CMPB #-1 a seek is necessary: if the B register
86EE 2730 487: BEQ SEEKHOME contains a -1, then I am lost and
86F0 FE9015 488: LDX DISKINTCCB must do a restore; otherwise, a
86F3 AD18 489: JSR CCB:SEEK,X standard seek will suffice
86F5 EE28 490: LDX DSKINFO:SECTORDB,X I assert that I am on the right track
86F7 A612 491: LDAA RDSI:CYLINDER+1,X
86F9 FE9013 492: LDX DISKINTDCB remember which track we are on
86FC 8D76 493: BSR DISKSETCYLADD
86FE 494: SEEKDONE
86FE EE28 495: LDX DSKINFO:SECTORDB,X pick up the buffer page number in the
8700 E605 496: LDAB RDSI:SECTORBASE,X B register. pick up the sector number
8702 FE9013 497: LDX DISKINTDCB in the A register and offset by
8705 A64A 498: LDAA FDSECTOR,X the track base sector
8707 AB4C 499: ADDA FDFIRSTSEC,X
8709 6D42 500: TST FDRWRITE,X go off and do the read or write, as
870B 2673 501: BNE DISKWRITE appropriate
870D 7E87D4 502: JMP DISKREAD
503:
504: *** THE WESTERN DIGITAL TRICK OF STEP IN ONE/STEP OUT ONE SHOULD
505: *** BE ADDED TO MAKE THE DRIVER MORE ROBUST.
506: *** BUT DENNIS PAINTER SEZ IT DOESN'T WORK ON A PERSCI.
```

*should set
interrupt on
seek,
and on
read/write
instead of over-
entire
operation.*

MAL/6800 1.3F: 8710 SDDSDRIVERS
01/14/83 11:39:33; Page 26; Form 1
IOVFD.ASM

*** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

8710 A733	508:	SEEK3	STAA	DSKINFO:SEEKERRSTS+1,X	count a seek error, and
8712 6C31	509:		INC	DSKINFO:SEEKERRCNT+1,X	save the error status
8714 2602	510:		BNE	SEEK3.1	
8716 6C30	511:		INC	DSKINFO:SEEKERRCNT,X	
8718 B6FF	512:	SEEK3.1	LDAA	#-1	Say that I lost my place...
871A BD58	513:		BSR	DISKSETCYLADD	
871C 6A46	514:		DEC	FDSEEKRETRY,X	DOWN COUNT # TRIES LEFT
871E 2715	515:		BEQ	DISKSEEKERROR	B/ GAK! CROAK! DIE....
8720	516:	SEEKHOME			
8720 8D4D	517:		BSR	DISKABORT	KILL WHATEVER DISK IS DOING
8722 FE9015	518:		LDX	DISKINTCCB	
8725 AD12	519:		JSR	CCB:RESTDRE,X	
8727 FE9015	520:		LDX	DISKINTCCB	
872A AD09	521:		JSR	CCB:STATUS,X	*** why doesn't this check for success?
872C 8504	522:		BITA	#X00000100	(DN OTHER HAND, IF CYL 0, WHO CARES?)
872E 27E0	523:		BEQ	SEEK3	B/ DIDN'T GET TO CYL 0 FOR SOME REASON!?
8730 4F	524:		CLRA		
8731 8D41	525:		BSR	DISKSETCYLADD	SET "I'M AT CYLINDER 0"
8733 2080	526:		BRA	SEEK	GO TRY SEEK TO PROPER TRACK AGAIN

NAL/6800 1.3F: 8733 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 27; Form 1 *** CLOCK: DRIVER ***
IOVFD.ASM

```
8735      528: DISKSEEKERROR
8735 8604  529:      LDAA  #ERR:DISKSEEK/256      GET APPROPRIATE ERROR CODE
8737 C617  530:      LDAB  #ERR:DISKSEEK&#xFF
8739 2012  531:      BRA   DISKERROR1
          532:
873B      533: DISKWPERR
873B 8604  534:      LDAA  #ERR:DSKWRTPROT/256
873D C618  535:      LDAB  #ERR:DSKWRTPROT&#xFF
873F 200C  536:      BRA   DISKERROR1
          537:
8741      538: DISKERROR ; fatal read or write error occurred
8741 8604  539:      LDAA  #ERR:DISKREAD/256      ASSUME READ ERROR
8743 C615  540:      LDAB  #ERR:DISKREAD&#xFF
8745 6D42  541:      TST   FDRWRITE,X      WAS IT A READ OR A WRITE?
8747 2704  542:      BEQ   DISKERROR1      B/ IT'S A READ
8749 8604  543:      LDAA  #ERR:DISKWRITE/256
874B C616  544:      LDAB  #ERR:DISKWRITE&#xFF
874D      545: DISKERROR1
874D A701  546:      STAA  DCB:LASTERROR,X
874F E702  547:      STAB  DCB:LASTERROR+1,X
8751      548: DISKDONE
8751 6C00  549:      INC   DCB:DONEFLAG,X      SIGNAL "DISK DONE"
8753 FE9015 550:      LDX   DISKINTCCB
8756 6C00  551:      INC   CCB:BUSY,X      SD TASK KNOWS WE'RE FREE
8758      552: DISKDONE1
8758 FE9013 553:      LDX   DISKINTDCB
875B BD882B 554:      JSR   WAITFORINTERRUPT
875E      555: DISKINTUNEXPECTED
875E 8D0F  556:      BSR   DISKABORT
8760 20F6  557:      BRA   DISKDONE1
```

MAL/6800 1.3F: 8760 SDOSEDRIVERS
01/14/83 11:39:33; Page 28; Form 1
IDVFD.ASM

*** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

```
8762          559: CHECKDISKREADY
              560: ; It would be nice if this could be used to tell one that the drive
              561: ; did not have a diskette in it... Thank you Dennis Brown
8762 FE9015    562:          LDX    DISKINTCCB          return carry set if not ready;
8765 AD09      563:          JSR    CCB:STATUS,X        carry reset if ready--
8767 16        564:          TAB                      in either case, status is in A
8768 59        565:          ROLB
8769 39        566:          RTS
              567:
876A          568: MAKEDISKREADY
876A FE9015    569:          LDX    DISKINTCCB
876D 6E0C      570:          JMP    CCB:RESET,X
              571:
876F          572: DISKABORT
876F FE9015    573:          LDX    DISKINTCCB          abort whatever's being done
8772 6E0F      574:          JMP    CCB:ABORT,X
              575:
8774          576: DISKSETCYLADD ; mark DCBs that share heads as all being on track (A)
8774 EE4D      577:          LDX    FDHEADCHAIN,X
8776          578: DISKSETCYLADD.1
8776 A749      579:          STAA   FDCYL,X          all DCB's sharing the same head
8778 EE4F      580:          LDX    FDNEXTCHAIN,X        mechanism are chained together
877A 26FA      581:          BNE    DISKSETCYLADD.1      so that all FDCYL values will
877C FE9013    582:          LDX    DISKINTDCB          be equally correct
877F 39        583:          RTS
```

MAL/6800 1.3F: 877F SDOSDRIVERS
01/14/83 11:39:33; Page 29; Form 1
IDVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

8780	585: DISKWRITE		
8780 FE9015	586: LDX	DISKINTCCB	
8783 AD1E	587: JSR	CCB:WRITESECTOR,X	
8785 8DD8	588: BSR	CHECKDISKREADY	
8787 8540	589: BITA	#X01000000	IS DISK WRITE PROTECTED ?
8789 2680	590: BNE	DISKWPERR	B/ YEP.
878B 2404	591: BCC	DISKWRITE2	B/ READY
878D 8DD8	592: BSR	MAKEDISKREADY	since the drive must have shut down,
878F 200F	593: BRA	SEEKDONEJ	we'll try this again
	594:		
8791	595: DISKWRITE2		
8791 857C	596: BITA	#X01111100	Is the write OK?
8793 2612	597: BNE	DISKWRITE4	B/ NO
8795 FE9015	598: LDX	DISKINTCCB	
8798 AD21	599: JSR	CCB:VERIFYSECTOR,X	do a verify
879A 8DC6	600: BSR	CHECKDISKREADY	WELL?
879C 2405	601: BCC	DISKWRITE3	B/ 10-4
879E 8DCA	602: BSR	MAKEDISKREADY	It's not, so we'll try the write again
87A0	603: SEEKDONEJ		
87A0 7E86FE	604: JMP	SEEKDONE	

MAL/6800 1.3F: 87A0 SDO5DRIVERS
01/14/83 11:39:33; Page 30; Form 1
IOVFD.ASM

*** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

87A3	606: DISKWRITE3	
87A3 8518	607: BITA	%00011000 record not found or CRC error?
87A5 273E	608: BEQ	DISKDONEJ1 B/ no--everything's OK
87A7	609: DISKWRITE4	
87A7 A736	610: STAA	DSKINFO:WRITEERRSTS,X SAVE WRITE ERRDR STATUS
87A9 8D19	611: BSR	DISKSAVEERRLSN SAVE ERRORING LSN
87AB 6C35	612: INC	DSKINFO:WRITEERRCNT+1,X COUNT # WRITE ERRORS
87AD 2602	613: BNE	DISKWRITES
87AF 6C34	614: INC	DSKINFO:WRITEERRCNT,X
87B1	615: DISKWRITES	
87B1 6A47	616: DEC	FDRETRY,X
87B3 270C	617: BEQ	DISKERRDRJ B/ NO MORE TRIES LEFT
87B5 E647	618: LDAB	FDRETRY,X ON LAST TRY ?
87B7 5A	619: DECB	(=1?)
87B8 2704	620: BEQ	SEEKHOMEJ B/ YES, TRY HARDER
87BA 8510	621: BITA	%00010000 NO, DID WE GET "RECORD NOT FOUND" ?
87BC 27E2	622: BEQ	SEEKDONEJ B/ NOPE, TRY READ/WRITE AGAIN
87BE	623: SEEKHOMEJ	
87BE 7E8720	624: JMP	SEEKHOME GO SEE IF RE-SEEK HELPS
	625:	
87C1	626: DISKERRDRJ	
87C1 7E8741	627: JMP	DISKERROR
	628:	
87C4	629: DISKSAVEERRLSN	; save RDSI:LSN in DCB
87C4 EE2B	630: LDX	DSKINFO:SECTORDB,X
87C6 A603	631: LDAA	RDSI:LSN+1,X
87C8 E604	632: LDAB	RDSI:LSN+2,X
87CA FE9013	633: LDX	DISKINTDCB
87CD 6F3F	634: CLR	DSKINFO:ERRLSN,X
87CF A740	635: STAA	DSKINFO:ERRLSN+1,X
87D1 6741	636: STAA	DSKINFO:ERRLSN+2,X
87D3 39	637: RTS	

PSHA

save disk status

PULA

B

X

NAL/6800 1.3F; 87D3 SDOSEDRIVERS
01/14/83 11:39:33; Page 31; Form 1
IDVFD.ASM

*** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

```
87D4          639: DISKREAD
87D4 FE9015    640:      LDX   DISKINTCCB
87D7 AD1B      641:      JSR   CCB:READSECTOR,X
87D9 8D87      642:      BSR   CHECKDISKREADY
87DB 2404      643:      BCC   DISKREAD1          B/ READY
87DD 8D8B      644:      BSR   MAKEDISKREADY
87DF 20BF      645:      BRA   SEEKDONEJ
              646:
87E1          647: DISKREAD1
87E1 851C      648:      BITA  #200011100        Is the read OK?
87E3 260A      649:      BNE   DISKREAD4          B/ no
87E5          650: DISKDONEJ1
87E5 6D4B      651:      TST   FDCOMPLEMENT,X    complement data?
87E7 2703      652:      BEQ   DISKDONEJ          B/ NO
87E9 BD87FB    653:      JSR   DISKCOMPLEMENT     YES, COMPLEMENT DATA BEFORE WE QUIT!
87EC          654: DISKDONEJ
87EC 7E8751    655:      JMP   DISKDONE
              656:
87EF          657: DISKREAD4
87EF A73A      658:      STAA  DSKINFO:READERRSTS,X  SAVE READ ERROR STATUS
87F1 8DD1      659:      BSR   DISKSAVEERRLSN       save erroring LSN
87F3 6C39      660:      INC   DSKINFO:READERRCNT+1,X  COUNT # READ ERRORS
87F5 26BA      661:      BNE   DISKWRITES
87F7 6C38      662:      INC   DSKINFO:READERRCNT,X
87F9 20B6      663:      BRA   DISKWRITES          GO CHECK RETRY COUNT
```

MAL/6800 1.3F: 87F9 SDOSDRIVERS
01/14/83 11:39:33; Page 32; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** CLOCK: DRIVER ***

```
87FB      665: DISKCOMPLEMENT ; COMPLEMENT SECTOR CONTENTS (FOR IBM 3740 FORMAT)
87FB A609  666:      LDAA  DSKINFO:NBPS,X      get sector size
87FD E60A  667:      LDAB  DSKINFO:NBPS+1,X
87FF EE2B  668:      LDX   DSKINFO:SECTORDB,X
8801 EE05  669:      LDX   RDSI:SECTORBASE,X    MUST COMPLEMENT THE DATA FIRST
8803 4C    670:      INCA                      TO OFFSET "DECA" BELOW ON 1st PASS
8804      671: DISKCOMPL
8804 6300  672:      COM   0,X                  COMPLEMENT A BYTE
8806 08    673:      INX                      BUMP POINTER
8807 6300  674:      COM   0,X                  COMPLEMENT A BYTE
8809 08    675:      INX                      BUMP POINTER
880A 6300  676:      COM   0,X                  COMPLEMENT A BYTE
880C 08    677:      INX                      BUMP POINTER
880D 6300  678:      COM   0,X                  COMPLEMENT A BYTE
880F 08    679:      INX                      BUMP POINTER
8810 C004  680:      SUBB  #4                    = # BYTES LEFT TO COMPLEMENT
8812 26F0  681:      BNE   DISKCOMPL
8814 4A    682:      DECA
8815 26ED  683:      BNE   DISKCOMPL
8817 FE9013 684:      LDX   DISKINTDCB          TO BE NICE TO CALLER
881A 39    685:      RTS
```


MAL/6800 1.3F: 881A SDOSDRIVERS
01/14/83 11:39:33; Page 33; Form 1
IDVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Controller Primitives

```
0002      687:      IF      DAMFLOPPY:PERSCI
          688: *          WM FLOPPY DISK HARDWARE DEFINITIONS
          689:
0002      690:      IF      PERSCI
FFA0      691: PERSCI:PIACA      EQU      $FFA0
FFA1      692: PERSCI:PIACB      EQU      $FFA1
FFA2      693: PERSCI:PIADA      EQU      $FFA2      DMA PAGE NUMBER
FFA3      694: PERSCI:PIADB      EQU      $FFA3      drive select, misc. control
FFA4      695: PERSCI:WDCMDSTS    EQU      $FFA4      COMMAND / STATUS REGISTER
FFA5      696: PERSCI:WDTRACK     EQU      $FFA5      CURRENT TRACK REGISTER
FFA6      697: PERSCI:WDSECTOR    EQU      $FFA6      TARGET SECTOR REGISTER
FFA7      698: PERSCI:WDDATA      EQU      $FFA7      TARGET TRACK / DATA REGISTER
          699:      FIN      PERSCI
          700:
0002      701:      IF      DAMFLOPPY
FFB0      702: DAMFLOPPY:PIACA    EQU      $FFB0
FFB1      703: DAMFLOPPY:PIACB    EQU      $FFB1
FFB2      704: DAMFLOPPY:PIADA    EQU      $FFB2      DMA PAGE NUMBER
FFB3      705: DAMFLOPPY:PIADB    EQU      $FFB3      drive select, misc. control
FFB4      706: DAMFLOPPY:WDCMDSTS EQU      $FFB4      COMMAND / STATUS REGISTER
FFB5      707: DAMFLOPPY:WDTRACK  EQU      $FFB5      CURRENT TRACK REGISTER
FFB6      708: DAMFLOPPY:WDSECTOR EQU      $FFB6      TARGET SECTOR REGISTER
FFB7      709: DAMFLOPPY:WDDATA   EQU      $FFB7      TARGET TRACK / DATA REGISTER
          710:      FIN      DAMFLOPPY
```

MAL/6800 1.3F: 881A SDOSDRIVERS
01/14/83 11:39:33; Page 34; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Controller Primitives

8818	712:	FIN	DAMFLOPPY!PERSCI	
	713:	COUNTCOMMAND		
8818 FE9013	714:	LDX	DISKINTDCB	
881E 6C3E	715:	INC	DSKINFO:OPSCOUNT+2,X	COUNT # OPERATIONS ISSUED TO FLOPPY
8820 2606	716:	BNE	WAITFORINTERRUPT	
8822 6C3D	717:	INC	DSKINFO:OPSCOUNT+1,X	
8824 2602	718:	BNE	WAITFORINTERRUPT	
8826 6C3C	719:	INC	DSKINFO:OPSCOUNT,X	
8828	720:	WAITFORINTERRUPT		
8828 32	721:	PULA		
8829 33	722:	PULB		
882A A744	723:	STAA	FDDSTATE,X	
882C E745	724:	STAB	FDDSTATE+1,X	
882E 7E8E15	725:	JMP	SDOS+SDOS:RTI	

```
727: *      Test if an actual seek is required
728:
729: *      If the drive number has not changed, and the cylinder (track) number
730: *      has not changed, then no seek is necessary, and return is made with
731: *      carry clear; otherwise, return is made with carry set and the
732: *      previous cylinder number in the B register.
733:
734: *      a side effect is that the values of FDCYL, FDTARGETCYL, and FDDRIVE
735: *      are copied to the CCB, regardless of whether a seek is necessary
736: *      (this ensures that the CCB is set up for a subsequent restore, read,
737: *      or write)
738:
8831 739: TESTFORSEEK
8831 A604 740:      LDAA   CCB:DRIVE,X
8833 FE9013 741:      LDX     DISKINTDCB
8836 A148 742:      CMPA   FDDRIVE,X
8838 2623 743:      BNE     DOSEEK
883A A649 744:      LDAA   FDCYL,X
883C EE2B 745:      LDX     DSKINFO:SECTORDB,X
883E A112 746:      CMPA   RDSI:CYLINDER+1,X
8840 261B 747:      BNE     DOSEEK
8842 FE9013 748:      LDX     DISKINTDCB
749: *      BSR     COPYDCBTCCB
750: *      OKRTS
751:
8845 752: COPYDCBTCCB
8845 A648 753:      LDAA   FDDRIVE,X
8847 36 754:      PSHA
8848 E649 755:      LDAB   FDCYL,X
884A EE2B 756:      LDX     DSKINFO:SECTORDB,X
884C A612 757:      LDAA   RDSI:CYLINDER+1,X
884E FE9015 758:      LDX     DISKINTCCB
8851 A705 759:      STAA   CCB:CYL,X
8853 E706 760:      STAB   CCB:LASTCYL,X
8855 32 761:      PULA
8856 A704 762:      STAA   CCB:DRIVE,X
8858 FE9013 763:      LDX     DISKINTDCB
885B 0C39 764:      OKRTS
765:
885D 766: DOSEEK ; seek is required
885D FE9013 767:      LDX     DISKINTDCB
8860 8DE3 768:      BSR     COPYDCBTCCB
8862 0D39 769:      ERRORRTS
770:
0002 771:      IF     PERSCI
```

MAL/6800 1.3F: 8862 SDOSDRIVERS
01/14/83 11:39:33; Page 36; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
PerSci Controller Primitives

```
8864          773: PERSCI:STATUS
8864 B6FFA4    774:      LDAA  PERSCI:WDCMDSTS
8867 43        775:      COMA
8868 FE9013    776:      LDX   DISKINTDCB
8868 39        777:      RTS
              778:
886C          779: PERSCI:RESTORE
886C A604      780:      LDAA  CCB:DRIVE,X      get the drive address and add in
886E 8A08      781:      ORAA  #Z00001000      slow step, read, no DMA
8870 B7FFA3    782:      STAA  PERSCI:PIADB
8873 86FD      783:      LDAA  #(\X00000010)&$FF  restore
8875          784: PERSCI:ISSUECOMMAND
8875 B7FFA4    785:      STAA  PERSCI:WDCMDSTS
8878 7E881B    786:      JMP   COUNTCOMMAND
              787:
887B          788: PERSCI:ABORT
887B 862F      789:      LDAA  #(\X11010000)&$FF  ; Note that the Series 2000 does something funny here; somebody should go look.
887D B7FFA4    790:      STAA  PERSCI:WDCMDSTS  abort with no interrupts
8880 8D0E      791:      BSR   PERSCI:ABORT.RTS  wait about 30 uS for chip to settle
8882 8D0C      792:      BSR   PERSCI:ABORT.RTS
8884 8D0A      793:      BSR   PERSCI:ABORT.RTS
8886 F6FFA4    794:      LDAB  PERSCI:WDCMDSTS  return with status in B
8889 53        795:      COMB
888A B6FFA3    796:      LDAA  PERSCI:PIADB  clear possible interrupt
888D FE9013    797:      LDX   DISKINTDCB
8890          798: PERSCI:ABORT.RTS
8890 39        799:      RTS
              800:
              801:
8891          802: PERSCI:RESET
8891 862E      803:      LDAA  #(\X11010001)&$FF  abort with interrupt
8893 20E0      804:      BRA   PERSCI:ISSUECOMMAND
```

MAL/6800 1.3F: 8893 SDOSDRIVERS
01/14/83 11:39:33; Page 37; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
PerSci Controller Primitives

8895	806:	PERSCI:SETSEEK	
8895 209A	807:	BRA	TESTFORSEEK
	808:		
8897	809:	PERSCI:SEEK	
8897 A604	810:	LDAA	CCB:DRIVE,X
8899 B7FFA3	811:	STAA	PERSCI:PIADB
889C A606	812:	LDAA	CCB:LASTCYL,X
889E E605	813:	LDAB	CCB:CYL,X
88A0 43	814:	COMA	
88A1 B7FFA5	815:	STAA	PERSCI:WDTRACK
88A4 53	816:	COMB	
88A5 F7FFA7	817:	STAB	PERSCI:WDDATA
88AB 86E6	818:	LDAA	#(\%00011001)&%FF seek, load head, no verify
88AA 20C9	819:	BRA	PERSCI:ISSUECOMMAND
	820:		
88AC	821:	PERSCI:VERIFYSECTOR	
88AC A604	822:	LDAA	CCB:DRIVE,X don't want either write or DMA!!
88AE B7FFA3	823:	STAA	PERSCI:PIADB
88B1 200E	824:	BRA	PERSCI:READSECTOR.2

MAL/6800 1.3F: 88B1 SDOUSDIVERS
01/14/83 11:39:33; Page 38; Form 1
IOVFD.ASM

*** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
PerSci Controller Primitives

88B3	826: PERSCI:READSECTOR	
88B3 F7FFA2	827: STAB PERSCI:PIADA	set DMA page number
88B6 E604	828: LDAB CCB:DRIVE,X	set up controller for read, DMA
88B8 CA40	829: ORAB #Z01000000	
88BA F7FFA3	830: STAB PERSCI:PIADB	
88BD 43	831: COMA	
88BE B7FFA6	832: STAA PERSCI:WDSECTOR	set the sector number
88C1	833: PERSCI:READSECTOR.2	
88C1 BD887B	834: JSR PERSCI:ABORT	load head, if necessary
88C4 8677	835: LDAA #(\%10001000)&#FF	read sector
88C6 C520	836: BITB #Z00100000	head load status
88C8 2602	837: BNE PERSCI:READSECTOR.1	
88CA 8804	838: EDRA #Z00000100	make the head load
88CC	839: PERSCI:READSECTOR.1	
88CC 7E8875	840: JMP PERSCI:ISSUECOMMAND	
	841:	
88CF	842: PERSCI:WRITESECTOR	
88CF F7FFA2	843: STAB PERSCI:PIADA	set DMA page number
88D2 E604	844: LDAB CCB:DRIVE,X	
88D4 CAC0	845: ORAB #Z11000000	set up controller for write, DMA
88D6 F7FFA3	846: STAB PERSCI:PIADB	
88D9 43	847: COMA	
88DA B7FFA6	848: STAA PERSCI:WDSECTOR	set the sector number
88DD BD887B	849: JSR PERSCI:ABORT	see if necessary to load heads
88E0 8657	850: LDAA #(\%10101000)&#FF	write sector
88E2 C520	851: BITB #Z00100000	
88E4 2602	852: BNE PERSCI:WRITESECTOR.1	
88E6 8804	853: EDRA #Z00000100	load the heads
88E8	854: PERSCI:WRITESECTOR.1	
88E8 7E8875	855: JMP PERSCI:ISSUECOMMAND	
	856: FIN PERSCI	
0002	857: IF DAMFLOPPY	

MAL/6800 1.3F: 88EB SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 39; Form 1 DAM Floppy Controller Primitives
IOVFD.ASM

88EB	859: DAMFLOPPY:STATUS	
88EB B6FFB4	860: LDAA DAMFLOPPY:WDCMDSTS	
88EE FE9013	861: LDX DISKINTDCB	
88F1 39	862: RTS	
	863:	
88F2	864: DAMFLOPPY:RESTORE	
88F2 A604	865: LDAA CCB:DRIVE,X	
88F4 B7FFB3	866: STAA DAMFLOPPY:PIADB	
88F7 B602	867: LDAA #Z00000010	restore
88F9	868: DAMFLOPPY:ISSUECOMMAND	
88F9 B7FFB4	869: STAA DAMFLOPPY:WDCMDSTS	
88FC 7E881B	870: JMP COUNTCOMMAND	
	871:	
88FF	872: DAMFLOPPY:ABORT	
88FF B6D0	873: LDAA #Z11010000	abort with no interrupts
8901 B7FFB4	874: STAA DAMFLOPPY:WDCMDSTS	
8904 BDD0	875: BSR DAMFLOPPY:ABORT.RTS	wait about 30 uS for chip to settle
8906 BDD0	876: BSR DAMFLOPPY:ABORT.RTS	
8908 BDD0	877: BSR DAMFLOPPY:ABORT.RTS	
890A F6FFB4	878: LDAB DAMFLOPPY:WDCMDSTS	return with status in B
890D B6FFB3	879: LDAA DAMFLOPPY:PIADB	clear possible interrupt
8910 FE9013	880: LDX DISKINTDCB	
8913	881: DAMFLOPPY:ABORT.RTS	
8913 39	882: RTS	
	883:	
8914	884: DAMFLOPPY:RESET	
8914 B6D1	885: LDAA #Z11010001	abort with interrupt
8916 20E1	886: BRA DAMFLOPPY:ISSUECOMMAND	

MAL/6800 1.3F: B916 SDOSEDRIVERS *** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 40; Form 1 DAM Floppy Controller Primitives
IOVFD.ASM

```

    B91B      888: DAMFLOPPY:SETSEEK
891B 7E8B31   889:      JMP    TESTFORSEEK
            890:
    B91B      891: DAMFLOPPY:SEEK
891B A604     892:      LDAA   CCB:DRIVE,X
891D B7FF83   893:      STAA   DAMFLOPPY:PIADB
8920 A606     894:      LDAA   CCB:LASTCYL,X
8922 E605     895:      LDAB   CCB:CYL,X
8924 B7FF85   896:      STAA   DAMFLOPPY:WDTRACK
8927 F7FF87   897:      STAB   DAMFLOPPY:WDDATA
892A B619     898:      LDAA   #Z00011001      seek, load head, 12 mS step, no verify
892C 20CB     899:      BRA     DAMFLOPPY:ISSUECOMMAND
            900:
    B92E      901: DAMFLOPPY:VERIFYSECTOR
892E B6FF83   902:      LDAA   DAMFLOPPY:PIADB      turn off write, DMA
8931 B42F     903:      ANDA   #Z00101111
8933 B7FF83   904:      STAA   DAMFLOPPY:PIADB
8936 200D     905:      BRA     DAMFLOPPY:READSECTOR.2
```


MAL/6800 1.3F: 8936 SDOSDRIVERS
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IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
DAM Floppy Controller Primitives

8938	907: DAMFLOPPY:READSECTOR		
8938 F7FFB2	908: STAB DAMFLOPPY:PIADA	set DMA page number	
8938 E604	909: LDAB CCB:DRIVE,X	set up controller for read, DMA	
893D CA40	910: DRAB #Z01000000	read, DMA	
893F F7FFB3	911: STAB DAMFLOPPY:PIADB		
8942 B7FFB6	912: STAA DAMFLOPPY:WDSECTOR	set the sector number	
8945	913: DAMFLOPPY:READSECTOR.2		
8945 8D88	914: BSR DAMFLOPPY:ABORT	load head, if necessary	
8947 8680	915: LDAA #Z10000000	read sector	
8949 C520	916: BITB #Z00100000	head load status	
894B 2602	917: BNE DAMFLOPPY:READSECTOR.1		
894D 8A04	918: DRAA #Z00000100	make the head load	
894F	919: DAMFLOPPY:READSECTOR.1		
894F 7E8BF9	920: JMP DAMFLOPPY:ISSUECOMMAND		

MAL/6800 1.3F: 894F SDOSDRIVERS
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IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
DAM Floppy Controller Primitives

8952	922:	DAMFLOPPY:WRITESECTOR	
8952 F7FF82	923:	STAB DAMFLOPPY:PIADA	set DMA page number
8955 E604	924:	LDAB CCB:DRIVE,X	set up controller for write, DMA
8957 CAC0	925:	ORAB #Z11000000	
8959 B7FF86	926:	STAA DAMFLOPPY:WDSECTOR	target sector
895C B6FF85	927:	LDAA DAMFLOPPY:WDTRACK	check if write pre-compensation needed
895F 8115	928:	CMFA #21	
8961 2B02	929:	BMI DAMFLOPPY:WRITESECTOR.2	
8963 CA10	930:	ORAB #Z00010000	turn on write pre-compensation
8965	931:	DAMFLOPPY:WRITESECTOR.2	
8965 F7FF83	932:	STAB DAMFLOPPY:PIADB	
8968 BD88FF	933:	JSR DAMFLOPPY:ABORT	see if necessary to load heads
896B 86A0	934:	LDAA #Z10100000	write sector
896D C520	935:	BITB #Z00100000	
896F 2602	936:	BNE DAMFLOPPY:WRITESECTOR.1	
8971 8A04	937:	ORAA #Z00000100	load the heads
8973	938:	DAMFLOPPY:WRITESECTOR.1	
8973 7E8BF9	939:	JMP DAMFLOPPY:ISSUECOMMAND	
	940:	FIN DAMFLOPPY	

MAL/6800 1.3F: 8973 SDOSDRIVERS
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IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Virtual Floppy Driver Time-Out Routines

```

0002      942:      IF      PERSCI
8976      943: PERSCI:TIMEOUT
8976 CE9017 944:      LDX      #CCB:PERSCI
0002      945:      IF      DAMFLOPPY
8979 2003   946:      BRA      DISKTIMEOUT
          947:
          948:      FIN      DAMFLOPPY
          949:      FIN      PERSCI
0002      950:      IF      DAMFLOPPY
897B      951: DAMFLOPPY:TIMEOUT
897B CE9045 952:      LDX      #CCB:DAMFLOPPY
          953:      FIN      DAMFLOPPY
897E      954: DISKTIMEOUT
897E FF9015 955:      STX      DISKINTCCB      save CCB address
8981 AD09   956:      JSR      CCB:STATUS,X      touch controller to keep drive going
8983 FE9015 957:      LDX      DISKINTCCB
8986 6A03   958:      DEC      CCB:TIMEOUT,X      COUNT OFF 1 SEC
8988 261F   959:      BNE      DISKTIMEOUT1      B/ TIMER NOT ZERO YET
898A EE2C   960:      LDX      CCB:CURRENTDCB,X      point at DCB, again
898C A600   961:      LDAA     DCB:DONEFLAG,X
898E 2631   962:      BNE      DISKTIMEOUT2      B/ DISK IS DONE, GO AWAY
0002      963:      IF      DAMFLOPPY
          964: * should have code here to reset "load both heads" bit ??
          965:      FIN
8990 8604   966:      LDAA     #ERR:DEVICETIMEDOUT/256
8992 C612   967:      LDAB     #ERR:DEVICETIMEDOUT&#xFF
8994      968: DISKTIMEOUTERRORED ; timeout detected an error
8994 FF9013 969:      STX      DISKINTDCB      remember DCB address
8997 A701   970:      STAA     DCB:LASTERROR,X      remember device error code
8999 E702   971:      STAB     DCB:LASTERROR+1,X
899B 6C00   972:      INC      DCB:DONEFLAG,X      MARK DISK AS 'DONE'
899D FE9015 973:      LDX      DISKINTCCB      point at 'controller busy' flag
89A0 6C00   974:      INC      CCB:BUSY,X      and make it unbusy
89A2 6F04   975:      CLR      CCB:DRIVE,X      FORCE SEEK W/VERIFY ON NEXT READ/WRITE
89A4 6A04   976:      DEC      CCB:DRIVE,X
89A6 7E875E 977:      JMP      DISKINTUNEXPECTED
          978:
89A9      979: DISKTIMEOUT1 ; (X) -> controller table
89A9 49      980:      ROLA      save device ready status in carry
89AA EE2C   981:      LDX      CCB:CURRENTDCB,X      find DCB for device
89AC A600   982:      LDAA     DCB:DONEFLAG,X      is device done ?
89AE 2606   983:      BNE      DISKTIMEOUT1A      b/ yes, just keep it spinning
89B0 8604   984:      LDAA     #ERR:DEVICENOTREADY/256 assume the worst...
89B2 C624   985:      LDAB     #ERR:DEVICENOTREADY&#xFF
89B4 25DE   986:      BCS      DISKTIMEOUTERRORED      b/ drive not ready after 1 second
89B6      987: DISKTIMEOUT1A
89B6 FE9015 988:      LDX      DISKINTCCB
89B9 8600   989:      LDAA     #((1*TICKSPERSECOND+NTIMEOUTBLOCKS)/256
89BB C645   990:      LDAB     #((1*TICKSPERSECOND+NTIMEOUTBLOCKS)&#xFF
89BD A726   991:      STAA     CCB:TIMEOUTBLK+TIMEOUT:FUSE,X      plant a 1-second fuse
89BF E727   992:      STAB     CCB:TIMEOUTBLK+TIMEOUT:FUSE+1,X
89C1      993: DISKTIMEOUT2
89C1 7EBE15 994:      JMP      SDOS+SDOS:RTI
          995:      FIN      IO DRIVER BODY
          996:

```

MAL/6800 1.3F: 89C1 SDOSDRIVERS
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IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Virtual Floppy Driver Time-Out Routines

```

          997:
          411:      FIN
0001      412:      IF  STORAGEDEMON
          413:      INCLUDE      IOSTOREDEMON.ASM
0001      1:      IF  IO DRIVERBODY
```

MAL/6800 1.3F: 89C1 SDOSDRIVERS
01/14/83 11:39:33; Page 45; Form 1
IDSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

```

      3: *          DRIVES IMI7710 WITH 7711 INTELLIGENT CONTROLLER...
      4: *          VIA A "VIA" (A WONDERFUL ROCKWELL PART)
      5: *
      6: ; EQUATES FOR WINCHESTER DRIVER
      7:
0200      8: WDCNBPS      EQU      512          ; 512 BYTES PER SECTOR (TRANSFER)
      9:
0001     10:            IFUND      IMI7711
0000     11: IMI7711      EQU      0
      12:            FIN
0000     13:            IF      IMI7711
      15:            FIN
      16:
0001     17:            IFUND      IMI5007
0000     18: IMI5007      EQU      0
      19:            FIN
0000     20:            IF      IMI5007      mini-wini
      22:            FIN
      23:
0001     24:            IFUND      WDCNSPT
4E34     25: WDCNSPT      EQU      20020          DEFAULT TO 7710C
      26:            FIN
0001     27: WDCNTPC      EQU      1
0001     28: WDCNCYL      EQU      1
0080     29: WDCFATAL      EQU      $80          ; RETRY TYPE ERROR
      30:
0001     31: WDCFORMAT      EQU      1          ; FORMAT ENTIRE DISK COMMAND
0002     32: WDCREADCMD      EQU      2          ; CONTROL READ COMMAND
0003     33: WDCWRITECMD      EQU      3          ; CONTROL WRITE COMMAND
      34:
0005     35: WDCRETRY      EQU      5          ; FAILURE RETRY COUNT
      36:
      37:
      38: *          WINCHESTER DISK CONTROLLER DCB DEFINITIONS
      39: *
      89C4     40: ::          SET      *
      0042     41:            ORG      DSKINFO:SIZE      TACKS ON TO BOTTOM OF DISK.INFO TABLE
0042 0001     42: WDCREADWRITE      RMB      1          0 IS READ, <>0 IS WRITE
0043 0001     43: WDCDRIVE          RMB      1          DRIVE NUMBER
      0044     44: WDCSIZE          EQU      *
      89C4     45:            ORG      ::
```

47: ; BRANCH TABLE POINTED TO BY DCB AND USED BY SDDS

48:

89C4 9E2C	49: WDCDRIVER	FDB	WDCINIT	; ROUTINE TO CLEAR VIA SD ND INTERRUPTS
89C6 89E9	50:	FDB	WDCREAD	; READ SINGLE SECTOR
89C8 89E5	51:	FDB	WDCWRITE	; WRITE SINGLE SECTOR
89CA 8A22	52:	FDB	WDCWAITDONE	
89CC 8EDB	53:	FDB	ILLDEVICEOP	SDOS HANDLES ALL THE DISK STATUSES NECESSARY !
89CE 89D0	54:	FDB	WDCCDNTROL	; DISMOUNT OR FORMAT COMMAND
	55:			
89D0	56: WDCCDNTROL	;CMPA	#CC:DISMOUNTDISK	
89D0 8111	57:	CMPA	#CC:DISMOUNTDISK	
89D2 274C	58:	BEQ	WDCOKRTS	B/ DISMOUNT, NOTHING SPECIAL NEEDED.
	59:	;CMPA	#CC:FORMAT	
89D4 8115	60:	CMPA	#CC:FDRMAT	
89D6 2703	61:	BEQ	WDCFORMATX	B/ FDRMAT OPERATION
	62:	;JMP	ILLDEVICEOP	
89D8 7E8EDB	63:	JMP	ILLDEVICEOP	
89D8	64: WDCFORMATX	;LDA	#WDCFORMAT	DO A "SECNDARY" FORMAT OPERATION
89DB 8601	65:	LDAA	#WDCFORMAT	
	66:	;LDX	DCBFOINTER	
89DD DE06	67:	LDX	DCBPINTER	
	68:	;STA	WDCREADWRITE,X	
89DF A742	69:	STAA	WDCREADWRITE,X	
	70:	;LDA	#1	; SET RETRY COUNT AT 1
89E1 8601	71:	LDAA	#1	
89E3 200C	72:	BRA	WDCSETRETRY1	
	73:			
89E5	74: WDCWRITE	;LDA	#WDCWRITECMD	
89E5 8603	75:	LDAA	#WDCWRITECMD	
89E7 2002	76:	BRA	WDCOPSET	
	77:			
89E9	78: WDCREAD	;LDA	#WDCREADCMD	
89E9 8602	79:	LDAA	#WDCREADCMD	
89EB	80: WDCOPSET	;LDX	DCBPINTER	
89EB DE06	81:	LDX	DCBPINTER	
	82:	;STA	WDCREADWRITE,X	; SET THE OPERATION
89ED A742	83:	STAA	WDCREADWRITE,X	
	84:	;LDA	#WDCRETRY	; SET RETRY COUNT
89EF 8605	85:	LDAA	#WDCRETRY	
89F1	86: WDCSETRETRY1 ; ENTRY POINT	FDR	WDCFORMATX	
	87:	;STA	WDCRETRYCNT	
89F1 B7932D	88:	STAA	WDCRETRYCNT	
	89:	;CLR	DCB:LASTERRDR,X	
89F4 6F01	90:	CLR	DCB:LASTERRDR,X	
	91:	;CLR	DCB:LASTERROR+1,X	
89F6 6F02	92:	CLR	DCB:LASTERRDR+1,X	
	93:	;LDX	#WDCINTERFACE	; WAIT FDR INTERFACE FREE
89F8 CE9325	94:	LDX	#WDCINTERFACE	
	95:	;LDA	0,X	
89FB A600	96:	LDAA	0,X	
89FD 2603	97:	BNE	WDCSETUP	
	98:	;JSR	SDOS+SDOS:WAITEVENT	
89FF BDBE2A	99:	JSR	SDOS+SDOS:WAITEVENT	
8A02	100: WDCSETUP	;CLR	WDCINTERFACE	; SET INTERFACE BUSY
8A02 7F9325	101:	CLR	WDCINTERFACE	

MAL/6800 1.3F: 8A02 SDDSDRIVERS
 01/14/83 11:39:33; Page 47; Form 1
 IQSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 *** THE SD STORAGE DEMON DRIVER ***

	102:	;LDX	DCBPDINTER	
8A05 DE06	103:	LDX	DCBPDINTER	
8A07 FF9326	104:	STX	WDCDCBPDINTER ; INTERRUPTS SERVICE DCB ADDRESS	
	105:	;CLR	DCB:DONEFLAG,X ; CLEAR DONE	
8A0A 6F00	106:	CLR	DCB:DONEFLAG,X	
	107:	;LDX	#0	
8A0C CE0000	108:	LDX	#0	
8A0F FF9328	109:	STX	WDCCONTINUEPC ; SET INTERRUPTS NO GOOD	
	110:	;LDX	#WDCSTARTID	
8A12 CE8A5C	111:	LDX	#WDCSTARTID	
	112:	;JSR	SDOS+SDOS:STARTID ; ENTER INTERRUPTS SERVICE CODE	
8A15 BDBE24	113:	JSR	SDOS+SDOS:STARTID	
	114:	;LDX	DCBPDINTER ; IF FORMAT CONTROL CALL OPERATION	
8A18 DE06	115:	LDX	DCBPDINTER	
	116:	;LDA	WDCREADWRITE,X	
8A1A A642	117:	LDAA	WDCREADWRITE,X	
	118:	;CMPA	#WDCFORMAT	
8A1C 8101	119:	CMPA	#WDCFORMAT	
8A1E 2702	120:	BEQ	WDCWAITDONE B/ GO WAIT FOR FORMAT OPERATION COMPLETE	
8A20 0C39	121: WDCOKRTS	OKRTS		
	122:			
8A22	123: WDCWAITDONE	;LDX	DCBPDINTER ; WAIT FOR TRANSFER DONE	
8A22 DE06	124:	LDX	DCBPDINTER	
	125:	;LDA	DCB:DONEFLAG,X	
8A24 A600	126:	LDAA	DCB:DONEFLAG,X	
8A26 2603	127:	BNE	WDCWAIT1	
	128:	;JSR	SDOS+SDOS:WAITEVENT	
8A28 BDBE2A	129:	JSR	SDOS+SDOS:WAITEVENT	
8A2B	130: WDCWAIT1	;LDX	DCBPDINTER	
8A2B DE06	131:	LDX	DCBPDINTER	
	132:	;LDX	DCB:LASTERROR,X	
8A2D EE01	133:	LDX	DCB:LASTERRDR,X	
8A2F 27EF	134:	BEQ	WDCOKRTS	
	135:	;JMP	ERRETX	
8A31 7EBEE0	136:	JMP	ERRETX	
8A34 0C39	137:	OKRTS		

139: * VIA REGISTER DEFINITIONS

0001	140:	IFUND	CONRAC
0000	141: CONRAC	EQU	0
	142:	FIN	
0000	143:	IF	CONRAC
	145:	FIN	
0000	146:	IFUND	WAVEMATE
	148:	FIN	
0001	149:	IF	WAVEMATE
FF40	150: STORAGEDEMONVIA	EQU	\$FF40
	151:	FIN	
0001	152:	IFUND	EXORCISOR
0000	153: EXORCISOR	EQU	0
	154:	FIN	
0000	155:	IF	EXORCISOR
	157:	FIN	
	158:		
0001	159:	IF	CONRAC!WAVEMATE!EXORCISOR
FF4C	160: VIAPCR	EQU	STORAGEDEMONVIA+\$C ; CONTROL REGISTER
FF4D	161: VIAIFR	EQU	VIAPCR+1 ; INTERRUPT FLAG
FF4E	162: VIAIER	EQU	VIAIFR+1 ; INTERRUPT ENABLE
	163:		
FF40	164: VIADRB	EQU	STORAGEDEMONVIA+\$0 ; DATA REGISTERS
FF41	165: VIADRA	EQU	VIADRB+1
FF42	166: VIADDRB	EQU	VIADRA+1
FF43	167: VIADDRA	EQU	VIADDRB+1 ; DATA DIRECTION REGISTERS
FF44	168: VIATILL	EQU	VIADDRA+1
FF45	169: VIAT1CH	EQU	VIATILL+1 ; INTERVAL TIMER HIGH BYTE
FF46	170: VIATILLA	EQU	VIAT1CH+1
FF47	171: VIAT1LH	EQU	VIATILLA+1
	172:		
FF4B	173: VIAACR	EQU	STORAGEDEMONVIA+\$B ; AUXILIARY CONTROL REGISTER - USED FOR CLOCK
	174: *		
FF4F	175: VIADRAF	EQU	STORAGEDEMONVIA+\$F ; PORT A - NO HANDSHAKE CONTROL
	176:		
	177:	FIN	
0001	178:	IFUND	WMSERIES2000
0000	179: WMSERIES2000	EQU	0
	180:	FIN	
0000	181:	IF	WMSERIES2000 WITH ITS INVERTED I/O ADDRESS LINES (YUK!)
	203:	FIN	WMSERIES2000

MAL/6800 1.3F: 8A34 SDOSDRIVERS
01/14/83 11:39:33; Page 49; Form 1
IOSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

8A36	205: WDCRESET	;CLR	VIADDRA	MAKE PA0 SIDE OF VIA BE AN "INPUT" PORT
8A36 7FFF43	206:	CLR	VIADDRA	
	207:	;LDA	#Z11011010	; WATCH FOR READY AND #BUSDIR=1
8A39 86DA	208:	LDAA	#Z11011010	
	209:	;STA	VIAPCR	; VIA PRG CONTROL REG
8A3B 87FF4C	210:	STAA	VIAPCR	
	211:	;LDA	VIADRA	; ISSUE STROBE SO READY PULSE CAN BE SEEN
8A3E 86FF41	212:	LDAA	VIADRA	
	213:	;LDX	\$(20000*2)//8	; PULSE CB2 FOR 20ms. AS PER 7711 RESET SPECIFICATION
8A41 CE138B	214:	LDX	\$(20000*2)//8	
8A44 09	215: WDCRESETLP	DEX		; WAIT LONG ENOUGH FOR PULSE...
8A45 26FD	216:	BNE	WDCRESETLP	
	217:	;LDA	#Z00010010	; RESET INTERRUPT BITS
8A47 8612	218:	LDAA	#Z00010010	
	219:	;STA	VIAIFR	; ACK INTERRUPTS THAT MIGHT ACCIDENTALLY BE PENDING
8A49 87FF4D	220:	STAA	VIAIFR	(assume I/O response can't come back this fast!)
	221:	;STA	VIAIER	; AND CLEAR THE INTERRUPT ENABLE
8A4C 87FF4E	222:	STAA	VIAIER	
	223:	;LDA	#Z11111010	
8A4F 86FA	224:	LDAA	#Z11111010	
	225:	;STA	VIAPCR	; STOP PULSE, LEAVE CA2 IN "PULSE ON R/W"
8A51 87FF4C	226:	STAA	VIAPCR	
8A54 0C39	227:	OKRTS		

GOING HIGH

GOING HIGH

PCR 4 = 0
watch for CB1 ↓
= 1
watch for CB1 ↑

229: ; FEED THE WINCHESTER A COMMAND

230:

BA56 231: WDCFORMSERVJ ;JMP WDCFORMSERV ; GO HANDLE "FORMAT" COMMAND
BA56 7E8B3B 232: JMP WDCFORMSERV

233:

BA59 234: WDCREADSERVJ ;JMP WDCREADSERV ; GO DO READ SECTOR LOGIC
BA59 7E8B4F 235: JMP WDCREADSERV

236:

BA5C 237: WDCSTARTIO EQU * CONTROL TRANSFERS HERE TO START DISK I/O
BA5C 0E 238: WDCCMDFEED CLI ; RE-ENABLE INTERRUPTS

239:

BA5D FE9326 240: LDX WDCDCBPINTER

BA60 6C3E 241: INC DSKINFO:OPSCOUNT+2,X

BA62 2606 242: BNE WDCCMDFEED0

BA64 6C3D 243: INC DSKINFO:OPSCOUNT+1,X

BA66 2602 244: BNE WDCCMDFEED0

BA68 6C3C 245: INC DSKINFO:OPSCOUNT,X

BA6A 246: WDCCMDFEED0 ;JSR WDCWAITAVAILABLE ; WAIT FOR COMMAND AND DATA BUS AVAILABLE

BA6A B08C1E 247: JSR WDCWAITAVAILABLE

248:

BA6D FE9326 249: LDX WDCDCBPINTER

250:

BA70 A642 251: LDAA WDCREADWRITE,X ; COMMAND TYPE

252:

BA72 B08BE0 253: JSR WDCOUTDATA ; OUTPUT COMMAND BYTE

254:

BA75 A643 255: LDAA WDCDRIVE,X ; DRIVE SELECT

256:

BA77 B08BE0 257: JSR WDCOUTDATA

258:

BA7A A642 259: LDAA WDCREADWRITE,X ; CHECK IF FORMAT COMMAND

260:

BA7C B101 261: CMPA #WDCFORMAT

BA7E 27D6 262: BEQ WDCFORMSERVJ ; B/ ALL FORMAT PARAMETERS SENT!

BA80 263: WDCCMDFEED1 ;LDX DSKINFO:SECTORDB,X

BA80 EE2B 264: LDX DSKINFO:SECTORDB,X

265:

BA82 A604 266: LDAA RDSI:LSN+2,X ; FEED LOW BYTE OF

267:

BA84 B08BE0 268: JSR WDCOUTDATA ; DISK ADDRESS OUT

269:

BA87 A603 270: LDAA RDSI:LSN+1,X ; AND HIGH BYTE LOGICAL DISK ADDRESS

271:

BA89 B08BE0 272: JSR WDCOUTDATA

273:

BA8C FE9326 274: LDX WDCDCBPINTER

275:

BA8F A642 276: LDAA WDCREADWRITE,X

277:

BA91 B102 278: CMPA #WDCREADCMD

BA93 27C4 279: BEQ WDCREADSERVJ ; GO DO READ TRANSFER AND CHECK

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281: ; WRITE TRANSFER SECTION
282:
8A95 283: WDCWRITESERV ; WRITE A SECTOR TO 7710
284: ;JSR WDCSET4TRANS ; SET X = PAGE ADR
8A95 BD8D01 285: JSR WDCSET4TRANS
286: ;LDA ##FF ; SET VIA TO OUTPUT MODE (AND SET UP 255 CYCLE COUNTER)
8A98 86FF 287: LDAA ##FF
288: ;STA VIADDR ; SO AS TO OUTPUT A 512 BYTE SECTOR
8A9A B7FF43 289: STAA VIADDR
8A9D 290: WDCWRITEWAIT1ST ; WAIT FOR 1ST DATA REQUEST
8A9D F5FF4D 291: BITB VIAIFR FIRST DATA REQUEST ARRIVE ?
8AA0 2608 292: BNE WDCWRITELOOP B/ YES, GIVE THE 7710 ITS DATA
8AA2 08 293: INX NO, DELAY AWHILE (???? Us. MAX)
8AA3 09 294: DEX
8AA4 4A 295: DECA DOWN COUNT FUSE
8AA5 26F6 296: BNE WDCWRITEWAIT1ST B/ MORE TIME TO WAIT
297: ;JMP WDCQUIET1 FUSE EXPIRED, SO DO WE!
8AA7 7E8B31 298: JMP WDCQUIET1
299:
8AAA 300: WDCWRITELOOP ; OUTPUT BYTES LOOP, OPTIMIZED FOR SPEED!
301: ;LDX WDCPOINTER ; GET POINTER TO NEXT BLOCK OF 8 BYTES
8AAA FE932B 302: LOX WDCPOINTER
303: ;LDA ,X ; FETCH BYTE TO FEED TO CONTROLLER
8AAD A600 304: LDAA 0,X
8AAF F5FF4D 305: BITB VIAIFR ; IS 7710 READY FOR NEXT BYTE ?
8AB2 2602 306: BNE WDCWRITE0 B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8AB4 BD6E 307: BSR WDCWRITEWAIT SIGH... GO WAIT FOR 7710 TO BE READY
8AB6 308: WDCWRITE0 ;STA VIADRA ; OUTPUT DATA BYTE AND ISSUE STROBE
8AB6 B7FF41 309: STAA VIADRA
310: ;LDA 1,X ; FETCH BYTE TO FEED TO CONTROLLER
8AB9 A601 311: LDAA 1,X
8ABB F5FF4D 312: BITB VIAIFR ; IS 7710 READY FOR NEXT BYTE ?
8ABE 2602 313: BNE WDCWRITE1 B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8AC0 BD62 314: BSR WDCWRITEWAIT SIGH... GO WAIT FOR 7710 TO BE READY
8AC2 315: WDCWRITE1 ;STA VIADRA ; OUTPUT DATA BYTE AND ISSUE STROBE
8AC2 B7FF41 316: STAA VIADRA
317: ;LDA 2,X ; FETCH BYTE TO FEED TO CONTROLLER
8AC5 A602 318: LDAA 2,X
8AC7 F5FF4D 319: BITB VIAIFR ; IS 7710 READY FOR NEXT BYTE ?
8ACA 2602 320: BNE WDCWRITE2 B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8ACC BD56 321: BSR WDCWRITEWAIT SIGH... GO WAIT FOR 7710 TO BE READY
8ACE 322: WDCWRITE2 ;STA VIADRA ; OUTPUT DATA BYTE AND ISSUE STROBE
8ACE B7FF41 323: STAA VIADRA
324: ;LDA 3,X ; FETCH BYTE TO FEED TO CONTROLLER
8AD1 A603 325: LDAA 3,X
8AD3 F5FF4D 326: BITB VIAIFR ; IS 7710 READY FOR NEXT BYTE ?
8AD6 2602 327: BNE WDCWRITE3 B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8AD8 BD4A 328: BSR WDCWRITEWAIT SIGH... GO WAIT FOR 7710 TO BE READY
8ADA 329: WDCWRITE3 ;STA VIADRA ; OUTPUT DATA BYTE AND ISSUE STROBE
8ADA B7FF41 330: STAA VIADRA
331: ;LDA 4,X ; FETCH BYTE TO FEED TO CONTROLLER
8ADD A604 332: LDAA 4,X
8ADF F5FF4D 333: BITB VIAIFR ; IS 7710 READY FOR NEXT BYTE ?
8AE2 2602 334: BNE WDCWRITE4 B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8AE4 BD3E 335: BSR WDCWRITEWAIT SIGH... GO WAIT FOR 7710 TO BE READY

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

8AE6	336: WDCWRITE4	;STA	VIADRA	; OUTPUT DATA BYTE AND ISSUE STROBE
8AE6 B7FF41	337:	STAA	VIADRA	
	338:	;LDA	5,X	; FETCH BYTE TO FEED TO CONTROLLER
8AE9 A605	339:	LDAA	5,X	
8AEB F5FF4D	340:	BITB	VIAIFR	; IS 7710 READY FOR NEXT BYTE ?
8AEE 2602	341:	BNE	WDCWRITE5	B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8AF0 8D32	342:	BSR	WDCWRITEWAIT	SIGH... GO WAIT FOR 7710 TO BE READY
8AF2	343: WDCWRITE5	;STA	VIADRA	; OUTPUT DATA BYTE AND ISSUE STROBE
8AF2 B7FF41	344:	STAA	VIADRA	
	345:	;LDA	6,X	; FETCH BYTE TO FEED TO CONTROLLER
8AF5 A606	346:	LDAA	6,X	
8AF7 F5FF4D	347:	BITB	VIAIFR	; IS 7710 READY FOR NEXT BYTE ?
8AFA 2602	348:	BNE	WDCWRITE6	B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8AFC 8D26	349:	BSR	WDCWRITEWAIT	SIGH... GO WAIT FOR 7710 TO BE READY
8AFE	350: WDCWRITE6	;STA	VIADRA	; OUTPUT DATA BYTE AND ISSUE STROBE
8AFE B7FF41	351:	STAA	VIADRA	
	352:	;LDA	7,X	; FETCH BYTE TO FEED TO CONTROLLER
8B01 A607	353:	LDAA	7,X	
8B03 F5FF4D	354:	BITB	VIAIFR	; IS 7710 READY FOR NEXT BYTE ?
8B06 2602	355:	BNE	WDCWRITE7	B/ USUAL CASE, 7710 IS READY FOR ANOTHER
8B08 8D1A	356:	BSR	WDCWRITEWAIT	SIGH... GO WAIT FOR 7710 TO BE READY
8B0A	357: WDCWRITE7	;STA	VIADRA	; OUTPUT DATA BYTE AND ISSUE STROBE
8B0A B7FF41	358:	STAA	VIADRA	
	359:	;LDA	WDCPOINTER+1	ADVANCE POINTER BY 8 BYTES
8B0D B6932C	360:	LDAA	WDCPOINTER+1	
8B10 8B08	361:	ADDA	#8	
	362:	;STA	WDCPOINTER+1	
8B12 B7932C	363:	STAA	WDCPOINTER+1	
8B15 2403	364:	BCC	WDCWRITED	B/ UPPER HALF DOES NOT NEED MODIFICATION
8B17 7C932B	365:	INC	WDCPOINTER	PROPAGATE CARRY TO UPPER HALF
8B1A 7A932A	366: WDCWRITED	DEC	WDCCOUNT	DOWN COUNT NUMBER OF 8 BYTE BLOCKS TO SEND
8B1D 268B	367:	BNE	WDCWRITELoop	B/ MORE 8 BYTE BLOCKS TO WRITE
	368:	;CLR	VIADDRA	; MAKE VIA PORT AN INPUT PORT WHEN DONE
8B1F 7FFF43	369:	CLR	VIADDRA	
8B22 2017	370:	BRA	WDCFORMSERV	GO WAIT FOR 7710 TO FINISH OPERATION

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 *** THE SD STORAGE DEMON DRIVER ***

8B24	372: WDCWRITEWAIT	; WAIT FOR 7710 TO BE READY FOR NEXT BYTE
8B24 36	373:	PSHA ; SAVE THE DATA BYTE TO SEND
8B25 4F	374:	CLRA ; SET TIMEOUT LIMIT IN (A)
8B26 F5FF4D	375: WDCWRITEWAITLOOP	BITB VIAIFR ; LOOK AGAIN
8B29 260E	376:	BNE WDCWRITEWAITEXIT ; B/ FINALLY, IS READY!
8B2B 4A	377:	DECA DOWN COUNT FUSE
8B2C 26F8	378:	BNE WDCWRITEWAITLOOP B/ SOME FUSE STILL LEFT
8B2E 31	379:	INS BANG! TIME'S UP...POP DATA BYTE TO BE SENT
8B2F	380: WDCQUIETERR	; 7710 DID NOT RESPOND IN REASONABLE LENGTH OF TIME
	381:	;LEAS 2,S POP RETURN ADDRESS
0000	382:	IF 2<0
	385:	ELSE
0002	386:	RPT 2
8B2F 31	387:	INS
	388:	FIN
8B31	389: WDCQUIET1	; IMI DRIVE DID NOT RESPOND IN REASONABLE TIME
	390:	;JSR WDCRESET ; MAYBE HITTING BELOW THE BELT WILL RE-SYNCH
8B31 BD8A36	391:	JSR WDCRESET
	392:	;LDA #X1001111 ; PICK UP VERY FUNNY ERROR STATUS
8B34 864F	393:	LDAA #X1001111
	394:	;JMP WDCFATAL0 ; GO STORE ERROR AND RETRY
8B36 7E8C8E	395:	JMP WDCFATAL0
	396:	
8B39 32	397: WDCWRITEWAITEXIT	PULA ; GET THE DATA BYTE BACK
8B3A 39	398:	RTS
	399:	
8B3B	400: WDCFORMSERV	EQU *
	401:	;JSR WDCWAIT4INT ; GO START INTERRUPT FOR COMMAND DONE
8B3B BD8C3C	402:	JSR WDCWAIT4INT
	403:	;JSR WDCINDATA ; CHECK DONE STATUS
8B3E BD8C07	404:	JSR WDCINDATA
	405:	;JSR WDCPROCST ; GO CHECK STATUS RETURN IF OK
8B41 BD8C84	406:	JSR WDCPROCST
8B44	407: WDCDONE	EQU *
	408:	;LDX WDCDCBPINTER
8B44 FE9326	409:	LDX WDCDCBPINTER
8B47 6C00	410:	INC DCB:DONEFLAG,X ; SET DONE
8B49 7C9325	411:	INC WDCINTERFACE ; INTERFACE DONE
	412:	;JMP SDOS+SDOS:RESCHEDULE
8B4C 7EBE18	413:	JMP SDOS+SDOS:RESCHEDULE

Can't optimize xfer for 7211

MAL/6800 1.3F: 884C SDO5DRIVERS
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*** SDDS I/D drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

415: ; READ TRANSFER SECTION

416:

884F	417:	WDCREADSERV	;JSR	WDCWAIT4INT	; WAIT FOR 7710 INTERRUPT ON READ COMPLETE
884F 8D8C3C	418:		JSR	WDCWAIT4INT	
	419:		;JSR	WDCINDATA	; GET STATUS ON BUS
8852 8D8C07	420:		JSR	WDCINDATA	
	421:		;JSR	WDCPRDCST	; GO PROCESS STATUS RETRY IF NEEDED
8855 8D8C84	422:		JSR	WDCPRDCST	
	423:		;JSR	WDCSET4TRANS	
8858 8D8D01	424:		JSR	WDCSET4TRANS	
8858	425:	WDCREADLDP	; INPUT	BYTES FOR SECTOR LDOP, OPTIMIZED FOR SPEED	
	426:		;LDX	WDCPOINTER	; GET POINTER TO NEXT BLOCK OF 8 BYTES
885B FE932B	427:		LDX	WDCPOINTER	
885E F5FF4D	428:		BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
8861 2602	429:		BNE	WDCREAD0	B/ DATA IS READY
8863 8D6E	430:		BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
8865	431:	WDCREAD0	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
8865 86FF41	432:		LDAA	VIADRA	
	433:		;STA	,X	; SAVE DATA IN SECTOR BUFFER
8868 A700	434:		STAA	,X	
886A F5FF4D	435:		BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
886D 2602	436:		BNE	WDCREAD1	B/ DATA IS READY
886F 8D62	437:		BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
8871	438:	WDCREAD1	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
8871 86FF41	439:		LDAA	VIADRA	
	440:		;STA	1,X	; SAVE DATA IN SECTOR BUFFER
8874 A701	441:		STAA	1,X	
8876 F5FF4D	442:		BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
8879 2602	443:		BNE	WDCREAD2	B/ DATA IS READY
887B 8D56	444:		BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
887D	445:	WDCREAD2	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
887D 86FF41	446:		LDAA	VIADRA	
	447:		;STA	2,X	; SAVE DATA IN SECTOR BUFFER
8880 A702	448:		STAA	2,X	
8882 F5FF4D	449:		BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
8885 2602	450:		BNE	WDCREAD3	B/ DATA IS READY
8887 8D4A	451:		BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
8889	452:	WDCREAD3	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
8889 86FF41	453:		LDAA	VIADRA	
	454:		;STA	3,X	; SAVE DATA IN SECTOR BUFFER
888C A703	455:		STAA	3,X	
888E F5FF4D	456:		BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
8891 2602	457:		BNE	WDCREAD4	B/ DATA IS READY
8893 8D3E	458:		BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
8895	459:	WDCREAD4	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
8895 86FF41	460:		LDAA	VIADRA	
	461:		;STA	4,X	; SAVE DATA IN SECTOR BUFFER
8898 A704	462:		STAA	4,X	
889A F5FF4D	463:		BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
889D 2602	464:		BNE	WDCREAD5	B/ DATA IS READY
889F 8D32	465:		BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
88A1	466:	WDCREAD5	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
88A1 86FF41	467:		LDAA	VIADRA	
	468:		;STA	5,X	; SAVE DATA IN SECTOR BUFFER
88A4 A705	469:		STAA	5,X	

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

88A6 F5FF4D	470:	BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
88A9 2602	471:	BNE	WDCREAD6	B/ DATA IS READY
88AB 8D26	472:	BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
88AD	473: WDCREAD6	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
88AD B6FF41	474:	LDAA	VIADRA	
	475:	;STA	6,X	; SAVE DATA IN SECTOR BUFFER
88B0 A706	476:	STAA	6,X	
88B2 F5FF4D	477:	BITB	VIAIFR	; IS ANOTHER DATA BYTE READY ?
88B5 2602	478:	BNE	WDCREAD7	B/ DATA IS READY
88B7 8D1A	479:	BSR	WDCREADWAIT	; GO WAIT FOR 7710 READY WITH ANOTHER BYTE
88B9	480: WDCREAD7	;LDA	VIADRA	; READ DATA AND ISSUE ACKNOWLEDGE PULSE
88B9 B6FF41	481:	LDAA	VIADRA	
	482:	;STA	7,X	; SAVE DATA IN SECTOR BUFFER
88BC A707	483:	STAA	7,X	
	484:	;LDA	WDCPDINTER+1	; ADVANCE BUFFER POINTER BY 8
88BE B6932C	485:	LDAA	WDCPDINTER+1	
88C1 8B08	486:	ADDA	#8	
	487:	;STA	WDCPDINTER+1	
88C3 B7932C	488:	STAA	WDCPDINTER+1	
88C6 2403	489:	BCC	WDCREADD	B/ DON'T HAVE TO BUMP UPPER HALF
88C8 7C932B	490:	INC	WDCPDINTER	
88CB 7A932A	491: WDCREADD	DEC	WDCCOUNT	DOWN COUNT # OF 8 BYTE BLOCKS TO SEND
88CE 26B8	492:	BNE	WDCREADLOOP	
	493:	;JMP	WDCDONE	ALL DONE READING SECTOR !
88D0 7E8844	494:	JMP	WDCDONE	
	495:			
88D3	496: WDCREADWAIT	; WAIT FOR 7710 TO BE READY TO GIVE US NEXT BYTE		
88D3 4F	497:	CLRA		
88D4 F5FF4D	498: WDCREADWAITLOOP	BITB	VIAIFR	; WAIT FOR READY SIGNAL
88D7 2606	499:	BNE	WDCREADWAITRTS	B/ 7710 IS NOW READY
88D9 4A	500:	DECA		TIMED OUT ?
88DA 26F8	501:	BNE	WDCREADWAITLOOP	B/ NOT YET
	502:	;JMP	WDCQUIETERR	TIMED OUT, SOMETHING'S WRONG!
88DC 7E8B2F	503:	JMP	WDCQUIETERR	
	504:			
88DF 39	505: WDCREADWAITRTS	RTS		

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 *** THE SD STORAGE DEMON DRIVER ***

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      507: *
      508: *
      509: *
      8BE0 510: WDCOUTDATA EQU *
      511: ;LDB  $FF ; SELECT VIA MODE = OUTPUT
      8BE0 C6FF 512: LDAB $FF
      513: ;STB  VIADRA
      8BE2 F7FF43 514: STAB VIADRA
      515: ;STA  VIADRAF ; OUTPUT THE DATA, DON'T ISSUE PULSE (YET)
      8BE5 B7FF4F 516: STAA VIADRAF
      8BE8 4F 517: CLRA ; SET A LONG FUSE
      8BE9 518: WDCOUTDATA1 ;LDB  VIAIFR ; IS 7710 READY?
      8BE9 F6FF4D 519: LDAB VIAIFR
      8BEC C502 520: BITB  $00000010
      8BEE 2606 521: BNE  WDCOUTDATA1 ; YES
      8BF0 4A 522: DECA ; NO, DOWN COUNT FUSE
      8BF1 26F6 523: BNE  WDCOUTDATA1
      524: ;JMP  WDCQUIETERR
      8BF3 7E8B2F 525: JMP  WDCQUIETERR
      526:
      8BF6 527: WDCOUTDATA1 EQU *
      528: ;LDB  $11111010 ; WATCH FOR BUSDIR GOING LOW
      8BF6 C6FA 529: LDAB $11111010
      530: ;STB  VIAPCR
      8BF8 F7FF4C 531: STAB VIAPCR
      532: ;LDB  $00010010
      8BF8 C612 533: LDAB $00010010
      534: ;STB  VIAIFR ; SEE WDCWRITE1 FOR COMMENTS
      8BFD F7FF4D 535: STAB VIAIFR
      536: ;LDA  VIADRA ; ISSUE STROBE PULSE TO 7710
      8C00 B6FF41 537: LDAA VIADRA
      538: ;CLR  VIADRA ; RESTORE VIA PORT TO INPUT MODE FOR SAFETY
      8C03 7FFF43 539: CLR  VIADRA
      8C06 39 540: RTS

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

	542: *	WDCINDATA --- GET (A) FROM 7710 WHEN 7710 IS READY
	543: *	USED ONLY TO READ STATUS FROM 7710
	544: *	ASSERT: VIADDRA=0 HERE
	545:	
8C07	546: WDCINDATA	EQU *
8C07 4F	547:	CLRA ; SET LONG FUSE
8C08	548: WDCINDATA0	;LDB VIAIFR ; IS 7710 READY WITH DATA?
8C08 F6FF4D	549:	LDAB VIAIFR
8C08 C502	550:	BITB #X00000010
8C0D 2606	551:	BNE WDCINDATA1
8C0F 4A	552:	DECA
8C10 26F6	553:	BNE WDCINDATA0 ; B/ SOME MORE TIME LEFT
	554:	;JMP WDCQUIETERR
8C12 7E8B2F	555:	JMP WDCQUIETERR
	556:	
8C15	557: WDCINDATA1	EQU *
	558:	;LDB #X11101010 ; 7710 IS READY WITH DATA FOR US
8C15 C6EA	559:	LDAB #X11101010 ; WATCH FOR IFACTIVE GOING HIGH
	560:	;STB VIAPCR
8C17 F7FF4C	561:	STAB VIAPCR
0000	562:	IF CONRAC ??????? WHY ??????
	565:	FIN CONRAC
	566:	;LDA VIADRA ; GET STATUS, ACKNOWLEDGE 'READY' SIGNAL
8C1A B6FF41	567:	LDAA VIADRA
8C1D 39	568: WDCWAITRIS	RTS

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

```
570: * WDCWAITAVAILABLE -- WAIT FOR 7710 READY
571: *
8C1E 572: WDCWAITAVAILABLE EQU *
0001 573: IF M6800
574: ;LDX #(2*2500//256)*(1000//(4+2+2+4+2+4)) = 2.5 SECONDS AT 2MHZ
8C1E CE0460 575: LDX #(2*2500//256)*(1000//(4+2+2+4+2+4))
0003 576: ELSE (M6809)
579: FIN
8C21 580: WDCWAITAVAILABLELOOP ; WAIT AT MOST 2.5 SECONDS FOR DRIVE TO BE READY
581: ;LDB VIAIFR
8C21 F6FF4D 582: LDAB VIAIFR
8C24 C412 583: ANDB #200010010 CHECK: IS 7710 READY AND #BUS.DIR HIGH ?
584: ;CMPB #200010010 ...?
8C26 C112 585: CMPB #200010010
8C28 27F3 586: BEQ WDCWAITRTS ; B/ 7710 IS READY
8C2A 4A 587: DECA NO, DOWN COUNT LOWER 8 BITS OF FUSE
8C2B 26F4 588: BNE WDCWAITAVAILABLELOOP B/ FUSE NOT BURNED UP
8C2D 09 589: DEX DOWN COUNT UPPER 16 BITS OF FUSE
8C2E 26F1 590: BNE WDCWAITAVAILABLELOOP
591: ;LEAS 2,S THROW RETURN ADDRESS AWAY
0000 592: IF 2<0
595: ELSE
0002 596: RPT 2
8C30 31 597: INS
598: FIN
599: ;JSR WDCRESET TRY TO GET DRIVE'S ATTENTION
8C32 BD8A36 600: JSR WDCRESET
601: ;LDD #ERR:DEVICENDTREADY DECLARE DEVICE NOT READY
8C35 C624 602: LDAB #(ERR:DEVICENDTREADY)&FF
8C37 8604 603: LDAA #(ERR:DEVICENDTREADY)/256
604: ;JMP WDCQUITWITHERR GO STORE ERROR CODE IN DCB
8C39 7E8CE8 605: JMP WDCQUITWITHERR
```

MAL/6800 1.3F: 8C39 SDOSEDRIVERS
01/14/83 11:39:33; Page 59; Form 1
IOSTOREDEMON.ASM

*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

8C3C	607: WDCWAIT4INT	EQU	*	WAIT FOR "DONE" INTERRUPT
	608:	;PULB		
8C3C 32	609:	PULA		
8C3D 33	610:	PULB		
8C3E 01	611:	NOP		PREVENT WDC SELF INTERRUPT
8C3F 0F	612:	SEI		
	613:	;STD	WDCCONTINUEPC	; SAVE WHERE TO GO ON CMD DONE INTERRUPT
8C40 F79329	614:	STAB	WDCCONTINUEPC+1	
8C43 B79328	615:	STAA	WDCCONTINUEPC	
	616:	;LDX	WDCDCBPINTER	
8C46 FE9326	617:	LDX	WDCDCBPINTER	
	618:	;LDA	WDCREADWRITE,X	
8C49 A642	619:	LDAA	WDCREADWRITE,X	
	620:	;CMPA	#WDCFORMAT	
8C4B 8101	621:	CMPA	#WDCFORMAT	
8C4D 2605	622:	BNE	WDCWAIT4INT2	; B/ STANDARD 3 SEC WAIT
	623:	;LDX	#0	; FOREVER FOR FORMAT (TAKES 40 MINUTES ON 7710C)
8C4F CE0000	624:	LDX	#0	
8C52 2003	625:	BRA	WDCWAIT4INT3	
	626:			
8C54	627: WDCWAIT4INT2	EQU	*	
	628:	;LDX	#5*TICKSPERSECOND+NTIMEOUTBLOCKS	
8C54 CE0135	629:	LDX	#5*TICKSPERSECOND+NTIMEOUTBLOCKS	
8C57 FF93C2	630: WDCWAIT4INT3	STX	WDCTIMEOUTCOUNT	
	631:	;LDB	#Z10010000	; SET VIA INTERRUPT ON #BUSDIR GOING HIGH
8C5A C690	632:	LDAB	#Z10010000	
	633:	;STB	VIAIER	
8C5C F7FF4E	634:	STAB	VIAIER	
	635:	;LDA	VIAIFR	; IS DRIVE DONE WITH TRANSFER ?
8C5F B6FF4D	636:	LDAA	VIAIFR	
8C62 8510	637:	BITA	#Z00010000	...?
8C64 2603	638:	BNE	WDCINTERRUPT	B/ YES (THIS CODE HERE TO SIMPLIFY SINGLESTEPPING)
8C66	639: WDCINTUNEXPECTED	;JMP	SDOS+SDOS:RTI	; EXIT INTERRUPT SERVICE
8C66 7EBE15	640:	JMP	SDOS+SDOS:RTI	
	641:			
8C69	642: WDCINTERRUPT	;LDX	#0	
8C69 CE0000	643:	LDX	#0	
8C6C FF93C2	644:	STX	WDCTIMEOUTCOUNT	; CLEAR TIME OUT
	645:	;LDB	#Z00010000	; KILL THE INTERRUPT ENABLE
8C6F C610	646:	LDAB	#Z00010000	
	647:	;STB	VIAIER	
8C71 F7FF4E	648:	STAB	VIAIER	
	649:	;LDX	WDCCONTINUEPC	
8C74 FE9328	650:	LDX	WDCCONTINUEPC	
	651:	;LDD	#WDCINTUNEXPECTED RESET WHERE TO GO IF INTERRUPT	
8C77 C666	652:	LDAB	#(WDCINTUNEXPECTED)ÿ	
8C79 868C	653:	LDAA	#(WDCINTUNEXPECTED)/256	
	654:	;STD	WDCCONTINUEPC	
8C7B F79329	655:	STAB	WDCCONTINUEPC+1	
8C7E B79328	656:	STAA	WDCCONTINUEPC	
8C81 0E	657:	CLI		; RE ENABLE INTERRUPTS - SD FLOPPY AND RTC CAN WORK
	658:	;JMP	0,X	; RETURN TO CALLER
8C82 4E00	659:	JMP	0,X	

MAL/6800 1.3F: 8C84 SDOSDRIVERS
01/14/83 11:39:33; Page 60; Form 1
IOSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

8C84 4D	661: WDCPROCST	TSTA	PROCESS STATUS BITS
8C85 2706	662:	BEQ WDCPROCSTOKRTS	B/ NO TROUBLE AT ALL
8C87 8D1D	663:	BSR WDCSAVESTATUS	OOPS, HAD SOME KIND OF PROBLEM
8C89 8580	664:	BITA #WDCFATAL	WAS ERROR FATAL ?
8C8B 2605	665:	BNE WDCFATALERR	B/ YES
8C8D 39	666: WDCPROCSTOKRTS	RTS	NON-FATAL ERROR, CONTINUE
	667:		
8C8E 8D16	668: WDCFATAL0	BSR WDCSAVESTATUS	
8C90 2002	669:	BRA WDCFATAL2	
	670:		
8C92	671: WDCFATALERR	;LEAS 2,S	; POP RETURN OFF STACK
0000	672:	IF 2<0	
	675:	ELSE	
0002	676:	RPT 2	
8C92 31	677:	INS	
	678:	FIN	
8C94 7A932D	679: WDCFATAL2	DEC WDCRETRYCNT	; ALL 9 LIVES USED UP ?
8C97 273D	680:	BEQ WDCQUIT	; B/ YES, WE'RE DEAD
	681:	;LDA WDCRETRYCNT	ON PENULTIMATE RETRY ?
8C99 B6932D	682:	LDAA WDCRETRYCNT	
	683:	;CMPA #1	
8C9C 8101	684:	CMPA #1	
8C9E 2603	685:	BNE JWDCCMDFEED	B/ NO, JUST SEND COMMANDS AGAIN
	686:	;JSR WDCRESET	; ON LAST TRY, HIT BELOW THE BELT
8CA0 BD8A36	687:	JSR WDCRESET	
8CA3	688: JWDCCMDFEED	;JMP WDCCMDFEED	
8CA3 7E8A5C	689:	JMP WDCCMDFEED	
	690:		
8CA6	691: WDCSAVESTATUS	;LDX WDCDCBPOINTER	; SAVE ERROR STATUS
8CA6 FE9326	692:	LDX WDCDCBPOINTER	
	693:	;LDX DSKINFO:SECTORDB,X	SAVE RDSI:LSN AS DSKINFO:ERRLSN
8CA9 EE2B	694:	LDX DSKINFO:SECTORDB,X	
	695:	;LDB RDSI:LSN,X	
8CAB E602	696:	LDAB RDSI:LSN,X	
	697:	;PSHD	SAVE ERROR STATUS BYTE, UPPER 8 BITS OF LSN
8CAD 37	698:	PSHB	
8CAE 36	699:	PSHA	
	700:	;LDD RDSI:LSN+1,X	
8CAF E604	701:	LDAB (RDSI:LSN+1)+1,X	
8CB1 A603	702:	LDAA RDSI:LSN+1,X	
	703:	;LDX WDCDCBPOINTER	
8CB3 FE9326	704:	LDX WDCDCBPOINTER	
	705:	;STD DSKINFO:ERRLSN+1,X	
8CB6 E741	706:	STAB (DSKINFO:ERRLSN+1)+1,X	
8CB8 A740	707:	STAA DSKINFO:ERRLSN+1,X	
	708:	;PULB	RESTORE ERROR STATUS BYTE, UPPER 8 BITS OF LSN
8CBA 32	709:	PULA	
8CBB 33	710:	PULB	
	711:	;STB DSKINFO:ERRLSN,X	
8CBC E73F	712:	STAB DSKINFO:ERRLSN,X	
	713:	;LDB WDCREADWRITE,X	
8CBE E642	714:	LDAB WDCREADWRITE,X	
	715:	;CMPB #WDCREADCMD	IS THIS A READ OR A WRITE COMMAND ?
8CC0 C102	716:	CMPB #WDCREADCMD	
8CC2 2709	717:	BEQ WDCSAVEREADSTATUS	

MAL/6800 1.3F: 8CC2 SDOSDRIVERS
01/14/83 11:39:33; Page 61; Form 1
IOSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

	718:	;STA	DSKINFO:WRITEERRSTS,X ; LAST WRITE (OR FORMAT) ERROR STATUS
8CC4 A736	719:	STAA	DSKINFO:WRITEERRSTS,X
8CC6 6C35	720:	INC	DSKINFO:WRITEERRCNT+1,X ; 2 BYTE ERROR COUNT
8CC8 2602	721:	BNE	WDCSAVEWRITESTATUS1
8CCA 6C34	722:	INC	DSKINFO:WRITEERRCNT,X
8CCC	723:		WDCSAVEWRITESTATUS1
8CCC 39	724:	RTS	
	725:		
8CCD	726:	;STA	DSKINFO:READERRSTS,X ; LOG LAST READ ERROR
8CCD A73A	727:	STAA	DSKINFO:READERRSTS,X
8CCF 6C39	728:	INC	DSKINFO:READERRCNT+1,X
8CD1 2602	729:	BNE	WDCSAVEREADSTATUS1
8CD3 6C38	730:	INC	DSKINFO:READERRCNT,X
8CD5	731:		WDCSAVEREADSTATUS1
8CD5 39	732:	RTS	

NAL/6800.1.3F: 8CD5 SDQSDRIVERS
01/14/83 11:39:33; Page 62; Form 1
IDSTOREDEMON.ASM

*** SDQS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

8CD6	734: WDCQUIT	;CMPA	#Z10011111	A TIMEOUT IN MIDDLE OF TRANSFER ?
8CD6 819F	735:	CMPA	#Z10011111	
8CD8 2718	736:	BEQ	WDCTIMEOUT1	B/ YES, LET THE USER KNOW!
	737:	;CMPB	#WDCREADCMD	
8CDA C102	738:	CMPB	#WDCREADCMD	
8CDC 2706	739:	BEQ	WDCQUITREAD	
	740:	;LDD	#ERR:DISKWRITE	
8CDE C616	741:	LDAB	#(ERR:DISKWRITE)ÿ	
8CE0 8604	742:	LDAA	#(ERR:DISKWRITE)/256	
8CE2 2004	743:	BRA	WDCQUITWITHERR	
	744:			
8CE4	745: WDCQUITREAD	;LDD	#ERR:DISKREAD	
8CE4 C615	746:	LDAB	#(ERR:DISKREAD)ÿ	
8CE6 8604	747:	LDAA	#(ERR:DISKREAD)/256	
8CE8	748: WDCQUITWITHERR	;LDX	WDCDCBPINTER	JUST TO BE SAFE...
8CE8 FE9326	749:	LDX	WDCDCBPINTER	
	750:	;STD	DCB:LASTERROR,X	
8CEB E702	751:	STAB	(DCB:LASTERROR)+1,X	
8CED A701	752:	STAA	DCB:LASTERROR,X	
	753:	;JMP	WDCDONE	
8CEF 7E8B44	754:	JMP	WDCDONE	
	755:			
8CF2	756: WDCTIMEOUT	EQU	*	
8CF2	757: WDCTIMEOUT1	;LDX	#WDCINTUNEXPECTED	REMEMBER THAT WE DON'T EXPECT AN INTERRUPT!
8CF2 CE8C66	758:	LDX	#WDCINTUNEXPECTED	
8CF5 FF9328	759:	STX	WDCCONTINUEPC	
	760:	;JSR	WDCRESET	; HIT HIM SO MAYBE HE WILL WAKE UP
8CF8 BD8A36	761:	JSR	WDCRESET	
	762:	;LDD	#ERR:DEVICETIMEOUT	
8CFB C612	763:	LDAB	#(ERR:DEVICETIMEOUT)ÿ	
8CFD 8604	764:	LDAA	#(ERR:DEVICETIMEOUT)/256	
8CFF 20E7	765:	BRA	WDCQUITWITHERR	
	766:			
BD01	767: WDCSET4TRANS	;LDA	#WDCNBPS/8	; SET NUMBER OF 8 BYTE BLOCKS TO TRANSFER
BD01 8640	768:	LDAA	#WDCNBPS/8	
	769:	;STA	WDCCOUNT	
BD03 B7932A	770:	STAA	WDCCOUNT	
	771:	;LDX	WDCDCBPINTER	
BD06 FE9326	772:	LDX	WDCDCBPINTER	
	773:	;LDX	DSKINFO:SECTORDB,X	
BD09 EE2B	774:	LDX	DSKINFO:SECTORDB,X	
	775:	;LDX	RDSI:SECTORBASE,X	
BD0B EE05	776:	LDX	RDSI:SECTORBASE,X	
BD0D FF932B	777:	STX	WDCPINTER	; SET UP POINTER TO 1ST BLOCK OF 8 TO MOVE
	778:	;LDB	#Z00000010	; GET 'READY' LINE SENSE MASK
BD10 C602	779:	LDAB	#Z00000010	
BD12 39	780:	RTS		
	781:	FIN	IQDRIVERBODY	
0000	782:	IF	IQDRIVERPOLL	
	807:	FIN	IQDRIVERPOLL	
0000	808:	IF	IQDRIVERINIT	
	833:	FIN	IQDRIVERINIT	
0000	834:	IF	IQDRIVERRAM	
	886:	FIN	IQDRIVERRAM	
	887:	END	;UNEXPECTED EOF	

MAL/6800 1.3F: 8D12 SDOSDRIVERS
01/14/83 11:39:33; Page 63; Form 1
IDJUPITER.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** THE SD STORAGE DEMON DRIVER ***

```
414:      FIN
415:      INCLUDE      10VTCONFIG.ASM GENERATED BY MAKEVTCONFIG IMMEDIATELY BEFORE ASSY

0001      1:      if      iodriverbody
0001      2:      ifund   profile.MALVT
0001      3: profile.MALVT   equ      1
0001      4:      fin     profile.MALVT
0001      5:      ifund   profile.MALLPT
0001      6: profile.MALLPT   equ      1
0001      7:      fin     profile.MALLPT
0000      8:      ifund   profile.MALVT
0001      10:     fin     profile.MALVT
0001      11:     ifund   profile.RS232LPT
0001      12: profile.RS232LPT   equ      1
0001      13:     fin     profile.RS232LPT
0001      14:     ifund   profile.EPSONLPT
0001      15: profile.EPSONLPT   equ      1
0001      16:     fin     profile.EPSONLPT
0001      17:     ifund   profile.ADM3
0001      18: profile.ADM3      equ      1
0001      19:     fin     profile.ADM3
0001      20:     ifund   profile.GT100
0001      21: profile.GT100     equ      1
0001      22:     fin     profile.GT100
0001      23:     ifund   profile.H19
0001      24: profile.H19      equ      1
0001      25:     fin     profile.H19
0001      26:     ifund   profile.SOROCIO120
0001      27: profile.SOROCIO120   equ      1
0001      28:     fin     profile.SOROCIO120
```

MAL/6800 1.3F: 8D12 SDOSDRIVERS
01/14/83 11:39:33; Page 64; Form 1
IOVTCNFIG.ASM

*** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
VT Device-Specific Code

	30:	fin	iodriverbody	
0000	31:	if	iodriverinit	
	39:	fin	iodriverinit	
0001	40:	if	iodriverbody	
8D13	41:	ilputdev:\$FFC0		
8D13 B7FFC1	42:	staa	\$FFC1	output data
8D16 B6B5	43:	ldaa	#Z10110101	enable output interrupts
8D18 B7FFC0	44:	staa	\$FFC0	
8D1B	45:	rts:\$FFC0		
8D1B 39	46:	rts		
8D1C	47:	ilgetdev:\$FFC0		
8D1C F6FFC0	48:	ldab	\$FFC0	get the status first (becuz reading data clears it)
8D1F B6FFC1	49:	ldaa	\$FFC1	get the interrupt-causing data
8D22 7E8EA2	50:	jmp	ilgetdevstatusfromacia the rest is common code	
8D25	51:	tlcheckready:\$FFC0		
8D25 B6FFC0	52:	ldaa	\$FFC0	get the status
8D28 46	53:	rora	shift \$DCD into carry bit	
8D29 46	54:	rora		
8D2A 46	55:	rora		
8D2B 39	56:	rts		
	57:	fin	iodriverbody	
0000	58:	if	iodriverinit	
	66:	fin	iodriverinit	
0001	67:	if	iodriverbody	
8D2C	68:	ilputdev:\$FFC4		
8D2C B7FFC5	69:	staa	\$FFC5	output data
8D2F B6B5	70:	ldaa	#Z10110101	enable output interrupts
8D31 B7FFC4	71:	staa	\$FFC4	
8D34	72:	rts:\$FFC4		
8D34 39	73:	rts		
8D35	74:	ilgetdev:\$FFC4		
8D35 F6FFC4	75:	ldab	\$FFC4	get the status first (becuz reading data clears it)
8D38 B6FFC5	76:	ldaa	\$FFC5	get the interrupt-causing data
8D38 7E8EA2	77:	jmp	ilgetdevstatusfromacia the rest is common code	
8D3E	78:	tlcheckready:\$FFC4		
8D3E B6FFC4	79:	ldaa	\$FFC4	get the status
8D41 46	80:	rora	shift \$DCD into carry bit	
8D42 46	81:	rora		
8D43 46	82:	rora		
8D44 39	83:	rts		
	84:	fin	iodriverbody	
0000	85:	if	iodriverinit	
	93:	fin	iodriverinit	
0001	94:	if	iodriverbody	
8D45	95:	ilputdev:\$FFC8		
8D45 B7FFC9	96:	staa	\$FFC9	output data
8D48 B6B5	97:	ldaa	#Z10110101	enable output interrupts
8D4A B7FFC8	98:	staa	\$FFC8	
8D4D	99:	rts:\$FFC8		
8D4D 39	100:	rts		
8D4E	101:	ilgetdev:\$FFC8		
8D4E F6FFC8	102:	ldab	\$FFC8	get the status first (becuz reading data clears it)
8D51 B6FFC9	103:	ldaa	\$FFC9	get the interrupt-causing data
8D54 7E8EA2	104:	jmp	ilgetdevstatusfromacia the rest is common code	
8D57	105:	tlcheckready:\$FFC8		

MAL/6800 1.3F: 8D57 SDOSDRIVERS
01/14/83 11:39:33; Page 45; Form 1
IOVTCNFIG.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
VT Device-Specific Code

```
8D57 B6FFC8 106:      ldaa    $FFC8      get the status
8D5A 46      107:      rora          shift *DCD into carry bit
8D5B 46      108:      rora
8D5C 46      109:      rora
8D5D 39      110:      rts
              111:      fin    iedriverbody
0000         112:      if      iedriverpoll
              193:      fin    iedriverpoll
0000         194:      if      iedriverram
              521:      fin    iedriverram
              522:
              523:
0000         416:      INCLUDE      IOVDPBS.ASM
              1:      if      iedriverpoll
              3:      fin    iedriverpoll
0001         4:      if      iedriverbody
0001         5:      ifund    nexdpb
0000         6: nextdpb set      0
              7:      fin    nextdpb
```

MAL/6800 1.3F: 8D5D SDOSDRIVERS
01/14/83 11:39:33; Page 66; Form 1
10VTDPBS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
malvt profile (included in all standard I/O packages)

```
0001      9: profilenum.malvt equ 1
          10:
8D5E      11: thisdpb set      *
8D5E 01    12:      fcb      profilenum.malvt      profile name
8D5F 04    13:      fcb      dvtyp.console
8D60 0000  14:      fdb      nextdpb      next profile
8D62 50    15:      fcb      80      default width
8D63 18    16:      fcb      24      default depth
8D64 05    17:      fcb      5      flags
8D65 0171  18:      fdb      6*tickspersecond+ntimeoutblocks
8D67 0C39  19:      okrts      input translation routine
          20:      if      m6800!m6801
8D69 01    21:      nop
          22:      fin
8D6A 7EBDD0 23:      jmp      sdos+sdos:vtmalvt      perform control functions
8D6D 39    24:      rts      set output coloring
8D6E 01    25:      nop
8D6F 01    26:      nop
8D70 39    27:      rts      set background coloring
          28: *      nop
          29: *      nop
          30: *      fcb      0,0,0,0,0,0,0,0      gpinit data
8D5E      31: nextdpb set      thisdpb
```

MAL/6800 1.3F: 8D70 SDOSDRIVERS
01/14/83 11:39:33; Page 67; Form 1
IOVTDPBS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
mallpt profile (included in all standard I/O packages)

```
0009      33: profilenum.mallpt equ 9
          34:
      8D71      35: thisdpb set      *
8D71 09      36:      fcb      profilenum.mallpt      profile name
8D72 05      37:      fcb      dvtyp:printer
8D73 8D5E      38:      fdb      nextdpb      next profile
8D75 84      39:      fcb      132      default width
8D76 42      40:      fcb      66      default depth
8D77 03      41:      fcb      3      flags
8D78 01710266 42:      fdb      6*tickspersecond+ntimeoutblocks
8D7A 0C39      43:      okrts      input translation routine
      0001      44:      if      m6800!m6801
8D7C 01      45:      nop
          46:      fin
8D7D 7EBDCD      47:      jmp      sdos+sdos:vtmallpt      perform control functions
8D80 39      48:      rts      set output coloring
8D81 01      49:      nop
8D82 01      50:      nop
8D83 39      51:      rts      set background coloring
          52: *      nop
          53: *      nop
          54: *      fcb      0,0,0,0,0,0,0,0      gpinit data
      8D71      55: nextdpb set      thisdpb
```

HAL/6800 1.3F: 8D83 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 68; Form 1 hardcopyvt profile and support code (included in all standard I/O packages)
 IOVDPBS.ASM

```

0006      57: profilenum.hardcopyvt equ 6
          58:
8D84      59: thisdpb set      *
8D84 06   60:      fcb      profilenum.hardcopyvt      profile name
8D85 04   61:      fcb      dvtyp.console
8D86 8D71 62:      fdb      nextdpb      next profile
8D88 50   63:      fcb      80      default width
8D89 00   64:      fcb      0      default depth
8D8A 14   65:      fcb      20      flags
8D8B 0171 66:      fdb      6*tickspersecond+ntimeoutblocks
8D8D 0C39 67:      okrts      perform input translation
          68:      if      m6800!m6801
8D8F 01   69:      nop
          70:      fin
8D90 0D39 71:      errorrts      perform default control functions
          72:      if      m6800!m6801
8D92 01   73:      nop
          74:      fin
8D93 39   75:      rts      set output coloring
8D94 01   76:      nop
8D95 01   77:      nop
8D96 39   78:      rts      set background coloring
          79: *      nop
          80: *      nop
          81: *      fcb      0,0,0,0,0,0,0,0      gpinit data.
8D84      82: nextdpb set      thisdpb
0001      83:      ifund     profile.cenlpt
0002      84:      else
          112:      fin      profile.cenlpt
          0000      113:      ifund     profile.rs232lpt
          114:      else
  
```

MAL/6800 1.3F: 8D96 SDOSDRIVERS
01/14/83 11:39:33; Page 69; Form 1
IOVTDPBS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
rs2321pt profile and support code

```
116: ; Operates a printer using standard ascii control codes for everything
117:
000B 118: profilenum.rs2321pt equ 11
119:
8D97 120: thisdph set *
8D97 0B 121: fcb profilenum.rs2321pt profile name
8D98 05 122: fcb dvtyp.printer
8D99 8D84 123: fdb nextdph next profile
8D9B 84 124: fcb 132 default width
8D9C 42 125: fcb 66 default depth
8D9D 02 126: fcb 2 flags
8D9E 0171 127: fdb 6*tickspersecond+ntimeoutblocks
8DA0 0C39 128: okrts input translation routine
0001 129: if m6800!m6801
8DA2 01 130: nop
131: fin
8DA3 0D39 132: errorrts perform default control functions
0001 133: if m6800!m6801
8DA5 01 134: nop
135: fin
8DA6 39 136: rts set output coloring
8DA7 01 137: nop
8DA8 01 138: nop
8DA9 39 139: rts set background coloring
140: * nop
141: * nop
142: * fcb 0,0,0,0,0,0,0,0 gpinit data
8D97 143: nextdph set thisdph
144: fin profile.rs2321pt
0001 145: ifund profile.adm1
0002 146: else
219: fin profile.adm1
0000 220: ifund profile.adm3
221: else
```

MAL/6800 1.3F: 8DA9 SDO5DRIVERS
01/14/83 11:39:33; Page 70; Form 1
1DVTDPBS.ASM

*** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
adm3 profile and support code

```
0003      223: profilenum.adm3 equ 3
          224:
8DAA      225: thisdpb set    *
8DAA 03    226:      fcb    profilenum.adm3      profile name
8DAB 04    227:      fcb    dvtyp.console
8DAC 8D97  228:      fdb    nextdpb              next profile
8DAE 50    229:      fcb    80                    default width
8DAF 18    230:      fcb    24                    default depth
8DB0 04    231:      fcb    4                      flags
8DB1 0171  232:      fdb    6*tickspersecond+ntimeoutblocks
8DB3 7E8DC0 233:      jmp    xlatei:adm3          perform input translation
8DB6 7E8DCF 234:      jmp    specialoutput:adm3    perform control functions
8DB9 39    235:      rts                          set output coloring
8DBA 01    236:      nop
8DBB 01    237:      nop
8DBC 39    238:      rts                          set background coloring
8DBD 01    239:      nop
8DBE 01    240:      nop
8DBF 00    241:      fcb    0                      initial XLATEI state byte
8DAA      242: nextdpb set    thisdpb
```

MAL/6800 1.3F: 8DBF SDOSDRIVERS
01/14/83 11:39:33; Page 71; Form 1
IDVTDPRS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
adm3 profile and support code

```
0001      244:      ifund      dcb:xlatestate
003D      245: dcb:xlatestate equ dcb:profile+dpb:gpinit      translate state byte is 1st gp byte
          246:      fin
8DC0      247: xlatei:adm3
          248: ;   translate adm3 input found in (a), returning translated character in (a)
          249: ;   with carry clear; carry set will cause character to be lost
8DC0 C67F 250:      ldab      #$7f      assume swap for underscore key
8DC2 815F 251:      cmpa      #$5f      swap for underscore ?
8DC4 2706 252:      beq       xlatei:adm3.b      b/ yes, use (B) as translation
8DC6 C65F 253:      ldab      #$5f      assume swap for DEL key
8DC8 817F 254:      cmpa      #$7f      swap for DEL key ?
8DCA 2601 255:      bne       xlatei:adm3.done      b/ no
      8DCC      256: xlatei:adm3.b ; use (B) as translation
8DCC 17      257:      tba
      8DCD      258: xlatei:adm3.done
8DCD 0C39 259:      okrts
```

NAL/6800 1.3F: 8BCD SDOSEDRIVERS *** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 72; Form 1 adm3 profile and support code
 IOVTDPBS.ASM

```

8BCF      261: specialoutput:adm3
          262: ;   called to perform control functions for a Lear Siegler ADM 3-A
          263: ;   The position, and clear functions are implemented. All others
          264: ;   must be simulated by the VT driver.

8DCF 8181  265:      cmpa    #specialfn:posn
8DD1 2706  266:      beq     specialoutput:adm3posn
8DD3 8182  267:      cmpa    #specialfn:clear
8DD5 271E  268:      beq     specialoutput:adm3clear
8DD7 0D39  269:      errorrts          adm3a can't do anything else
          270:

8DD9      271: specialoutput:adm3posn
8DD9 861B  272:      ldaa    #ascii:esc
8DD9 AD7D  273:      jsr     dcb:tlbuffer,x
8DD9 863D  274:      ldaa    #'=          set up to do a position fn
8DDF AD7D  275:      jsr     dcb:tlbuffer,x
8DE1 30    276:      tsx
8DE2 A602  277:      ldaa    2,x
8DE4 8B20  278:      adda    #20
8DE6 DE06  279:      ldx     dcb:pointer
8DE8 AD7D  280:      jsr     dcb:tlbuffer,x
8DEA 30    281:      tsx
8DEB A603  282:      ldaa    3,x
8DED 8B20  283:      adda    #20
8DEF DE06  284:      ldx     dcb:pointer
8DF1 AD7D  285:      jsr     dcb:tlbuffer,x
8DF3 0C39  286:      okrts
          287:

8DF5      288: specialoutput:adm3clear
8DF5 861A  289:      ldaa    #1a          performs a clear screen fn
8DF7 AD7D  290:      jsr     dcb:tlbuffer,x
8DF9 0C39  291:      okrts
          292:      fin     profile.adm3
0001      293:      ifund   profile.tvi912c
0002      294:      else
          360:      fin     profile.tvi912c
0001      361:      ifund   profile.soroc120
0002      362:      else
          431:      fin     profile.soroc120
0000      432:      ifund   profile.h19
          433:      else

```


MAL/6800 1.3F: 8DF9 SDOSDRIVERS
01/14/83 11:39:33; Page 73; Form 1
IOVTDPBS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
h19 profile and support code

```
0005      435: profilenum.h19 equ 5
          436:
8DFB      437: thisdpb set      $
8DFB 05    438:      fcb      profilenum.h19      profile name
8DFC 04    439:      fcb      dvtyp.console      dvtyp.console
8DFD 8DAA  440:      fdb      nextdpb      next profile
8DFF 50    441:      fcb      80      default width
8E00 18    442:      fcb      24      default depth
8E01 04    443:      fcb      4      flags
8E02 0171  444:      fdb      6*tickspersecond+ntimeoutblocks
8E04 7E8E11 445:      jmp      xlatei:h19      perform input translation
8E07 7E8E50 446:      jmp      specialoutput:h19      perform control functions
8E0A 7E8E8E 447:      jmp      coloring:h19      set output coloring
8E0D 39    448:      rts      set background coloring (none)
8E0E 01    449:      nop
8E0F 01    450:      nop
8E10 00    451:      fcb      0      initial XLATEI state byte
8DFB      452: nextdpb set      thisdpb
```

MAL/6800 1.3F: BE10 SDOSDRIVERS
01/14/83 11:39:33; Page 74; Form 1
10VTFP8S.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
h19 profile and support code

```
0000      454:      ifund    dcb:xlatestate
          456:      fin
BE11      457: xlatei:h19
          458: ;   translate h19 input found in (a), returning translated character in (a)
          459: ;   with carry clear; carry set will cause character to be lost
BE11 6D3D  460:      tst     dcb:xlatestate,x
BE13 2608  461:      bne     xlatei:h19.escape
BE15 8118  462:      cmpa    #ascii:esc
BE17 2605  463:      bne     xlatei:h19.ok
BE19 6C3D  464:      inc     dcb:xlatestate,x
BE1B 0D39  465:      errorrts
          466:
BE1D      467: xlatei:h19.b ; use (B) as translation of character
BE1D 17    468:      tba
BE1E      469: xlatei:h19.ok ; (A) is translated character
BE1E 0C39  470:      okrts
          471:
BE20      472: xlatei:h19.escape
          473: ;   if character following <ESC> is not A, B, C, D, J, N, or Q,
          474: ;   then bitch and revert to the standard state
BE20 6F3D  475:      clr     dcb:xlatestate,x
BE22 C60B  476:      ldab    #ascii:vt
BE24 8141  477:      cmpa    #'A                      cursor up?
BE26 27F5  478:      beq     xlatei:h19.b
BE28 C60A  479:      ldab    #ascii:lf
BE2A 8142  480:      cmpa    #'B                      cursor down?
BE2C 27EF  481:      beq     xlatei:h19.b
BE2E C60C  482:      ldab    #ascii:ff
BE30 8143  483:      cmpa    #'C                      cursor right?
BE32 27E9  484:      beq     xlatei:h19.b
BE34 C608  485:      ldab    #ascii:bs
BE36 8144  486:      cmpa    #'D                      cursor left?
BE38 27E3  487:      beq     xlatei:h19.b
BE3A C605  488:      ldab    #ascii:enq
BE3C 814A  489:      cmpa    #'J                      ^E?
BE3E 27DD  490:      beq     xlatei:h19.b
BE40 C615  491:      ldab    #ascii:nak
BE42 814E  492:      cmpa    #'N                      ^U?
BE44 27D7  493:      beq     xlatei:h19.b
BE46 C61B  494:      ldab    #ascii:esc
BE48 8151  495:      cmpa    #'Q                      <ESC>?
BE4A 27D1  496:      beq     xlatei:h19.b
BE4C      497: xlatei:h1932
BE4C 6C5E  498:      inc     dcb:beepcount,x
BE4E 0D39  499:      errorrts                      ignore character
```

```
8E50          501: specialoutput:h19
              502: ;   called to perform control functions for a Heath H-19
              503: ;   The position, clear and erase to end of line functions are implemented.

8E50 8181      504:      cmpa    #specialfn:posn
8E52 270A      505:      beq     specialoutput:h19posn
8E54 8182      506:      cmpa    #specialfn:clear
8E56 2722      507:      beq     specialoutput:h19clear
8E58 8183      508:      cmpa    #specialfn:eeol
8E5A 2728      509:      beq     specialoutput:h19eeol
8E5C 0D39      510:      errorrts          h19 can't do anything else
              511:

8E5E          512: specialoutput:h19posn
8E5E 861B      513:      ldaa    #ascii:esc
8E60 AD7D      514:      jsr     dcb:tlbuffer,x
8E62 8659      515:      ldaa    #'Y          set up to do a position fn
8E64 AD7D      516:      jsr     dcb:tlbuffer,x
8E66 30        517:      tsx
8E67 A602      518:      ldaa    2,x
8E69 8B20      519:      adda    #20
8E6B DE06      520:      ldx     dcbpointer
8E6D AD7D      521:      jsr     dcb:tlbuffer,x
8E6F 30        522:      tsx
8E70 A603      523:      ldaa    3,x
8E72 8B20      524:      adda    #20
8E74 DE06      525:      ldx     dcbpointer
8E76 AD7D      526:      jsr     dcb:tlbuffer,x
8E78 0C39      527:      okrts
              528:

8E7A          529: specialoutput:h19clear
8E7A 861B      530:      ldaa    #ascii:esc
8E7C AD7D      531:      jsr     dcb:tlbuffer,x
8E7E 8645      532:      ldaa    #'E          performs a clear screen fn
8E80 AD7D      533:      jsr     dcb:tlbuffer,x
8E82 0C39      534:      okrts
              535:

8E84          536: specialoutput:h19eeol
8E84 861B      537:      ldaa    #ascii:esc
8E86 AD7D      538:      jsr     dcb:tlbuffer,x
8E88 864B      539:      ldaa    #'K          performs a eeol fn
8E8A AD7D      540:      jsr     dcb:tlbuffer,x
8E8C 0C39      541:      okrts
```

MAL/6800 1.3F: 8E8C SDOSEDRIVERS
01/14/83 11:39:33; Page 76; Form 1
10VTDPBS.ASM

*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
h19 profile and support code

```
8E8E      543: coloring:h19
8E8E 8508  544:      bita    #Z00001000      reverse video desired ?
8E90 2608  545:      bne     coloring:h19reversevideo  b/ yes
8E92 861B  546:      ldaa    #ascii:esc      send "normal video" command
8E94 AD7D  547:      jsr     dcb:tlbuffer,x
8E96 8671  548:      ldaa    #'q
8E98 6E7D  549:      jmp     dcb:tlbuffer,x
          550:
8E9A      551: coloring:h19reversevideo
8E9A 861B  552:      ldaa    #ascii:esc      send "reverse video" request
8E9C AD7D  553:      jsr     dcb:tlbuffer,x
8E9E 8670  554:      ldaa    #'p
8EA0 6E7D  555:      jmp     dcb:tlbuffer,x
          556:      fin     profile.h19
0001      557:      ifund   profile.hazeltine
0002      558:      else
          561:      fin     profile.hazeltine
0001      562:      ifund   profile.beehive
0002      563:      else
          566:      fin     profile.beehive
0001      567:      ifund   profile.exorterm155
0002      568:      else
          743:      fin     exorterm155
```

MAL/6800 1.3F: 8EA0 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 77; Form 1 h19 profile and support code
10VTDPBS.ASM

```
8EA2      745: ilgetdevstatusfromacia
          746:
          747: ; receives control from the acia device access routine, returns either
          748: ; the available character, with carry clear, or the error status, with
          749: ; carry set.
          750:
          751: ; the data or error status is returned in (a)
          752:
          753: ; the status is defined as:
          754:
          755: ;      %00000001      framing error (probably BREAK received)
          756: ;      %00000010      overrun (data lost)
          757: ;      %00000100      parity error
          758:
8EA2 C570 759:      bitb      %01110000      check for parity, overrun, or framing errors
8EA4 2602 760:      bne      ilgetdevicestatusfromaciaerror
8EA6 0C39 761:      okrts
          762:
8EA8      763: ilgetdevicestatusfromaciaerror
8EA8 17   764:      tba      make a standard status byte
8EA9 44   765:      lsra
8EAA 44   766:      lsra
8EAB 44   767:      lsra
8EAC 44   768:      lsra
8EAD 8407 769:      anda      %00000111
8EAF 0D39 770:      errorrts
          771:      fin      iodriverbody
          772:      end
```

MAL/6800 1.3F: 8EAF SDOSDRIVERS
01/14/83 11:39:33; Page 78; Form 1
10JUPITER.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
CONFIG TABLE

0001	418:	IFUND	INTERRUPTSTACKSIZE	
0046	419:	INTERRUPTSTACKSIZE		EQU MINSTACK+7+7+7+7+7+7 7 FOR EACH POSSIBLE 420: * NESTED INTERRUPT RESULTING FROM A DEVICE
	421:	FIN	INTERRUPTSTACKSIZE	
	422: *			
8EB1 9377	423:	CNFGTABLE	FDB	DISKDCBS DEFAULT DISK MUST BE FIRST
8EB3 9627	424:	FDB	TTYDCB	CONSOLE MUST BE FIRST
8EB5 9D8D	425:	FDB	IOCBPOINTERS	
8EB7 08	426:	FCB	NIOCHANNELS	
8EB8 9DE3	427:	FDB	DSKBUFFERPOOL	
8EBA 081D	428:	FDB	DSKPOOLSIZE	
8EBC BDD3	429:	FDB	SDOS+SDOS:VTATTNCHECK	
8EBE 8407	430:	FDB	DEBUGSYSCALLHANDLER	
8EC0 8400	431:	FDB	DRIVERBASE	
8EC2 9D9D	432:	FDB	INTSETUP	
8EC4	433:	INTDISABLE		
0001	434:	IF	M6800!M6801	
8EC4 01	435:	NOP		INT DISABLE
	436:	FIN		
8EC5 0F	437:	SEI		
8EC6 39	438:	RTS		
8EC7	439:	INTENABLE		
8EC7 0E	440:	CLI		
8EC8 39	441:	RTS		
0001	442:	IF	M6800!M6801	
8EC9 01	443:	NOP		
	444:	FIN		
8ECA 3B	445:	INTRTI	RTI	INT RTI
8ECB 01	446:	NOP		
8ECC 01	447:	NOP		
8ECD 9DE2	448:	FDB	INTERRUPTSTACKEND-1	
8ECF 8FA2	449:	FDB	STACKSWITCHEDDEVICEPOLL	ROUTINE TO DETERMINE INTERRUPTING DEVICE
8ED1 9724	450:	FDB	TASKQUEUE	
8ED3 96C8	451:	FDB	TIMEOUTQUEUE	
8ED5 8DFB	452:	FDB	NEXTDPB	
8ED7 8410	453:	FDB	DEBUGINTERRUPT	WITH CONTEXT BLOCK ON STACK
	454: *			
0000	455:	IF	SDOSMT	
	457:	ELSE		
8ED9 0000	458:	FDB	0	NO SDOS/MT PRIMITIVES
	459:	FIN		
0000	460:	IF	SDOSMT	
	541:	FIN	SDOSMT	
	542:			
8EDB BD8E2D	543:	ILLDEVICEOP	JSR	SDOS+SDOS:ERROR
8EDE 040A	544:	FDB	ERR:ILLDEVICEOP	
	545: *			
8EE0 BD8E30	546:	ERRET	JSR	SDOS+SDOS:ERRORSAVE
8EE3 7EBE33	547:	JMP	SDOS+SDOS:ERRORED	
	548:			
0032	549:	PATCHSPACE	RPT	50
8EE6 3F	550:	SWI		

MAL/6800 1.3F: 8F17 SDO5DRIVERS *** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 79; Form 1 *** INTERRUPT POLL CHAINS ***
IOJUPITER.ASM

0000	552:	IODRIVERBODY	SET	0
0001	553:	IODRIVERPOLL	SET	1
	554:			
8F18	555:	STACKUNSWITCHEDDEVICEPOLL ; come here via IRQ vector		
	556:	INCLUDE		IOVTCONFIG.ASM
0000	1:	if	iodriverbody	
	30:	fin	iodriverbody	
0000	31:	if	iodriverinit	
	39:	fin	iodriverinit	
0000	40:	if	iodriverbody	
	57:	fin	iodriverbody	
0000	58:	if	iodriverinit	
	66:	fin	iodriverinit	
0000	67:	if	iodriverbody	
	84:	fin	iodriverbody	
0000	85:	if	iodriverinit	
	93:	fin	iodriverinit	
0000	94:	if	iodriverbody	
	111:	fin	iodriverbody	
0001	112:	if	iodriverpoll	

8F18	114:	vt:interruptpollchain	; should be first in poll chain
8F18 B6FFC0	115:	ldaa \$FFC0	test irq
8F1B 2A28	116:	bpl noint:\$FFC0	b/ no int here
8F1D CE9627	117:	ldx #dcb:\$FFC0	look more closely
8F20 8182	118:	cmpa #Z10000010	handle output interrupts pronto!
8F22 2608	119:	bne notoutput:\$FFC0	
8F24	120:	gotoutput:\$FFC0	
8F24 8695	121:	ldaa #Z10010101	disable output interrupt
8F26 B7FFC0	122:	staa \$FFC0	
8F29 7EBDDF	123:	jmp sdos+sdos:vtoutputint	
8F2C	124:	notoutput:\$FFC0	
8F2C 8504	125:	bita #Z00000100	data carrier detect dropped
8F2E 2708	126:	beq notdcdrop:\$FFC0	
8F30 F6FFC1	127:	ldab \$FFC1	clear interrupt caused by ~dcd
8F33 8502	128:	bita #Z00000010	output requested with ~dcd?
8F35 26ED	129:	bne gotoutput:\$FFC0	b/ yup!
8F37	130:	rti:\$FFC0	
8F37 3B	131:	rti	
8F38	132:	notdcdrop:\$FFC0	
8F38 8571	133:	bita #Z01110001	receiver register full or error
8F3A 2703	134:	beq notinput:\$FFC0	
8F3C 7EBDDC	135:	jmp sdos+sdos:vtinputint	
8F3F	136:	notinput:\$FFC0	
8F3F 8508	137:	bita #Z00001000	not CTS
8F41 26F4	138:	bne rti:\$FFC0	ignore CTS interrupt glitch
8F43 20FE	139:	bra *	wierd condition
8F45	140:	noint:\$FFC0	
8F45 86FFC4	141:	ldaa \$FFC4	test irq
8F48 2A28	142:	bpl noint:\$FFC4	b/ no int here
8F4A CE9763	143:	ldx #dcb:\$FFC4	look more closely
8F4D 8182	144:	cmpa #Z10000010	handle output interrupts pronto!
8F4F 2608	145:	bne notoutput:\$FFC4	
8F51	146:	gotoutput:\$FFC4	
8F51 8695	147:	ldaa #Z10010101	disable output interrupt
8F53 B7FFC4	148:	staa \$FFC4	
8F56 7EBDDF	149:	jmp sdos+sdos:vtoutputint	
8F59	150:	notoutput:\$FFC4	
8F59 8504	151:	bita #Z00000100	data carrier detect dropped
8F5B 2708	152:	beq notdcdrop:\$FFC4	
8F5D F6FFC5	153:	ldab \$FFC5	clear interrupt caused by ~dcd
8F60 8502	154:	bita #Z00000010	output requested with ~dcd?
8F62 26ED	155:	bne gotoutput:\$FFC4	b/ yup!
8F64	156:	rti:\$FFC4	
8F64 3B	157:	rti	
8F65	158:	notdcdrop:\$FFC4	
8F65 8571	159:	bita #Z01110001	receiver register full or error
8F67 2703	160:	beq notinput:\$FFC4	
8F69 7EBDDC	161:	jmp sdos+sdos:vtinputint	
8F6C	162:	notinput:\$FFC4	
8F6C 8508	163:	bita #Z00001000	not CTS
8F6E 26F4	164:	bne rti:\$FFC4	ignore CTS interrupt glitch
8F70 20FE	165:	bra *	wierd condition
8F72	166:	noint:\$FFC4	
8F72 B6FFC8	167:	ldaa \$FFC8	test irq
8F75 2A28	168:	bpl noint:\$FFC8	b/ no int here

MAL/6800 1.3F: 8F77 SDOSDRIVERS
01/14/83 11:39:33; Page 81; Form 1
IOVTCNFIG.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
VT Interrupt Poll Chain

```

8F77 CE98A2    169:      ldx    #dcb:$FFC8      look more closely
8F7A 8182      170:      cmpa   #Z10000010    handle output interrupts pronto!
8F7C 2608      171:      bne    notoutput:$FFC8
      8F7E      172:      gotoutput:$FFC8
8F7E 8695      173:      ldaa   #Z10010101    disable output interrupt
8F80 B7FFC8      174:      staa   $FFC8
8F83 7EBDDF      175:      jmp     sdos+sdos:vtoutputint
      8F86      176:      notoutput:$FFC8
8F86 8504      177:      bita   #Z00000100    data carrier detect dropped
8F88 2708      178:      beq    notdcddrop:$FFC8
8F8A F6FFC9      179:      ldab   $FFC9          clear interrupt caused by ~dcd
8F8D 8502      180:      bita   #Z00000010    output requested with ~dcd?
8F8F 26ED      181:      bne    gotoutput:$FFC8 b/ yup!
      8F91      182:      rti:$FFC8
8F91 3B        183:      rti
      8F92      184:      notdcddrop:$FFC8
8F92 8571      185:      bita   #Z01110001    receiver register full or error
8F94 2703      186:      beq    notinput:$FFC8
8F96 7EBDDC      187:      jmp     sdos+sdos:vtinputint
      8F99      188:      notinput:$FFC8
8F99 8508      189:      bita   #Z00001000    not CTS
8F9B 26F4      190:      bne    rti:$FFC8      ignore CTS interrupt glitch
8F9D 20FE      191:      bra    *              wierd condition
      8F9F      192:      noint:$FFC8
      193:      fin    iedriverpoll
      0000      194:      if     iedriverram
      521:      fin    iedriverram
      522:
      523:
8F9F 7EBE12      557:      JMP     SDOS+SDOS:IOINT      go switch stacks now
      558:
8FA2      559:      STACKSWITCHEDDEVICEPLL ; come here after switching stacks
0001      560:      IF     CLOCK
      561:      INCLUDE          IOLOCK.ASM
0000      1:      IF     IODRIVERBODY
      201:      FIN    IODRIVERBODY
0000      202:      IF     IODRIVERRAM
      228:      FIN    IODRIVERRAM
      229:
      230:
      562:      FIN
0001      563:      IF     STORAGEDEMON
      564:      INCLUDE          IOSTOREDEMON.ASM
0000      1:      IF     IODRIVERBODY
      781:      FIN    IODRIVERBODY
0001      782:      IF     IODRIVERPOLL
0001      783:      IF     USEDEMONASCLOCK
      784:      ;LDA   VIAIFR      CHECK FOR CLOCK INTERRUPT FROM VIA
8FA2 B6FF4D      785:      LDAA   VIAIFR
8FA5 84C0      786:      ANDA   #Z11000000    IRQ + CLOCK DONE ?
      787:      ;CMPA   #Z11000000    ...?
8FA7 81C0      788:      CMPA   #Z11000000
8FA9 2608      789:      BNE    WDCPLL1      B/ NO
      790:      ;STA   VIAIFR      ACKNOWLEDGE THE CLOCK INTERRUPT
8FAB B7FF4D      791:      STAA   VIAIFR

```

MAL/6800 1.3F: 8FAB SDOSDRIVERS
01/14/83 11:39:33; Page 82; Form 1
IOSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
VT Interrupt Poll Chain

```

      792:          ;LDA    #1          = 1/60TH SECOND
8FAE 8601      793:          LDAA   #1
      794:          ;JMP    SDOS+SDOS:CLOCKTICKED
8FB0 7EBE1B    795:          JMP     SDOS+SDOS:CLOCKTICKED
      8FB3      796: WDCPOLL1      EQU     *
      797:          FIN     USEDEMONASCLOCK
      798:          ;LDA    VIAIFR      ACCEPT DISK INTERRUPT ONLY IF NO CLOCK INTERRUPT PENDING
8FB3 B6FF4D    799:          LDAA   VIAIFR
8FB6 84D0      800:          ANDA   #%11010000    MASK TO OBTAIN CLOCK AND DISK INT BITS
      801:          ;CMPA   #%10010000    DISK ONLY ?
8FB8 8190      802:          CMPA   #%10010000
8FBA 2603      803:          BNE     WDCPOLLNEXT      B/ NO
      804:          ;JMP    WDCINTERRUPT    YES, GO SERVICE DISK INTERRUPT
8FBC 7EBC69    805:          JMP     WDCINTERRUPT
      8FBF      806: WDCPOLLNEXT      EQU     *
      807:          FIN     IO DRIVER POLL
      0000      808:          IF      IO DRIVER INIT
      833:          FIN     IO DRIVER INIT
      0000      834:          IF      IO DRIVER RAM
      886:          FIN     IO DRIVER RAM
      887:          END     ;UNEXPECTED EOF
      565:          FIN
      0001      566:          IF      VIRTUALFLOPPY
      567:          INCLUDE          IOVFD.ASM
      0000      1:          IF      IO DRIVER BODY
      57:          FIN     IO DRIVER BODY
      0000      58:          IF      IO DRIVER RAM
      127:          FIN     IO DRIVER RAM
      0000      128:          IF      IO DRIVER INIT
      172:          FIN     IO DRIVER INIT
      0000      173:          IF      IO DRIVER BODY
      410:          FIN     IO DRIVER BODY
      0001      411:          IF      IO DRIVER POLL
```

MAL/6800 1.3F: 8FBC SDOSDRIVERS
01/14/83 11:39:33; Page 83; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Virtual Floppy Driver Interrupt-Level Routines

```
8FBF      413: DISKINTSERVICE
0002      414:      IF      PERSCI
8FBF B6FFA1 415:      LDAA     PERSCI:PIACB      PerSci Controller
8FC3      416: PERSCIINTERRUPTMASK EQU #+1 ; set by RESET routines
8FC2 8580  417:      BITA     ##80          Want interrupt ?
8FC4 2709  418:      BEQ      DISKINTPERSCI.NO
8FC6 CE9017 419:      LDX      #CCB:PERSCI      PerSci interrupted, so absorb the
8FC9 F6FFA3 420:      LDAB     PERSCI:PIADB      interrupt from that controller
8FCC 7E86B5 421:      JMP      DISKINTERRUPT
8FCF      422: DISKINTPERSCI.NO ; not Persci
      423:      FIN      PERSCI
0002      424:      IF      DAMFLOPPY
8FCF B6FFB1 425:      LDAA     DAMFLOPPY:PIACB      DAM Floppy Controller
8FD3      426: DAMFLOPPYINTERRUPTMASK equ #+1
8FD2 8580  427:      BITA     ##80          Want interrupt ?
8FD4 2709  428:      BEQ      DISKINTDAMFLOPPY.NO
8FD6 CE9045 429:      LDX      #CCB:DAMFLOPPY      DAM floppy interrupted, so absorb
8FD9 F6FFB3 430:      LDAB     DAMFLOPPY:PIADB      the interrupt from that controller
8FDC 7E86B5 431:      JMP      DISKINTERRUPT
8FDF      432: DISKINTDAMFLOPPY.NO
      433:      FIN      DAMFLOPPY
0000      434:      FIN      IODRIVERPOLL
      435:      IF      IODRIVERBODY
      995:      FIN      IODRIVERBODY
      996:
      997:
      568:      FIN
      569:
8FDF FE8FE9 570:      LDX      BADINTERRUPTCOUNT      CAN'T FIGURE OUT WHO IT IS...
8FE2 08     571:      INX
8FE3 FF8FE9 572:      STX      BADINTERRUPTCOUNT      BUMP CRAZY INTERRRUPT COUNTER
8FE6 7EBE15 573:      JMP      SDOS+SDOS:RTI      AND HOPE IT WENT AWAY !
```

MAL/6800 1.3F: 8FE6 SDOSSDRIVERS *** SDOSS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 84; Form 1 *** WORKING STORAGE ***
 IOJUPITER.ASM

```

0000      575: IODRIVERPOLL SET 0
0001      576: IODRIVERRAM SET 1
577:
8FE9 0000 578: BADINTERRUPTCOUNT FOR 0 # OF INTERRUPTS FROM UNKNOWN DEVICES
579:
0000      580: IF SDOSENT
588: FIN SDOSENT
589:
0001      590: IF CLOCK
591: INCLUDE IOCLOCK.ASM

0000      1: IF IODRIVERBODY
201: FIN IODRIVERBODY
0001      202: IF IODRIVERRAM
8FEB 01 203: CLOCKDCB FCB 1 CLOCK'S ALWAYS DONE
8FEC 0000 204: FCB 0 LASTER
8FEE 8FFB 205: FCB CLOCKSTR
8FF0 0000 206: FCB NEXTDEVICEOCB
8FF2 8415 207: FCB CLOCKRIVER
8FF4 208: DIV60DIVIDEND EQU *
8FF4 000000 209: CLOCKBUFFER FCB 0,0,0
8FF7 00 210: DAY FCB 0
8FF8 00 211: MONTH FCB 0
8FF9 00 212: YEAR FCB 0
8FFA FF 213: CLOCKFRACTION FCB -1
8FFB 434C4F43 214: CLOCKSTR FCC 'CLOCK:'
9001 00 215: FCB 0
216: *
8FEB 217: NEXTDEVICEOCB SET CLOCKDCB
218: *
9002 219: TIME$ EQU *
9002 30303A 220: TIME$:HOURS FCC '00:'
9005 30303A 221: TIME$:MINUTES FCC '00:'
9008 303020 222: TIME$:SECONDS FCC '00 '
9008 223: DATE$ EQU *
9008 30302F 224: DATE$:MONTH FCC '00/'
900E 30302F 225: DATE$:DAY FCC '00/'
9011 3030 226: DATE$:YEAR FCC '00'
227: *
228: FIN IODRIVERRAM
229:
230:
592: FIN
0000 593: IF BLACKHOLE
595: FIN
0000 596: IF SOLP
599: FIN
0001 600: IF VIRTUALFLOPPY
601: INCLUDE IOVFD.ASM

0000      1: IF IODRIVERBODY
57: FIN IODRIVERBODY
0001 58: IF IODRIVERRAM
9013 0002 59: DISKINTDCB RMB 2 address of DCB for interrupt service
9015 0002 60: DISKINTCCB RMB 2 address of CCB for interrupt service

```

MAL/6800 1.3F: 9015 SDOSEDRIVERS
01/14/83 11:39:33; Page 85; Form 1
IOVFD.ASM

*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** WORKING STORAGE ***

	62: *	Controller Definitions	
	63:		
0002	64:	IF	PERSCI
	65: *	PerSci Controller	
	66:		
9017	67: CCB:PERSCI		
9017 01	68:	FCB	1 controller busy: 0 = yes, (>0) = no
9018 FFA0	69:	FDB	\$FFA0 address
901A 00	70:	FCB	0 timeout counter
901B FF	71:	FCB	\$FF drive to access
901C FF	72:	FCB	\$FF cylinder to access
901D FF	73:	FCB	\$FF last cylinder accessed
901E 86C2	74:	FDB	DISKINTSTARTPERSCI
9020 7E8864	75:	JMP	PERSCI:STATUS
9023 7E8891	76:	JMP	PERSCI:RESET
9026 7E887B	77:	JMP	PERSCI:ABORT
9029 7E886C	78:	JMP	PERSCI:RESTORE
902C 7E8895	79:	JMP	PERSCI:SETSEEK
902F 7E8897	80:	JMP	PERSCI:SEEK
9032 7E88B3	81:	JMP	PERSCI:READSECTOR
9035 7E88CF	82:	JMP	PERSCI:WRITESECTOR
9038 7E88AC	83:	JMP	PERSCI:VERIFYSECTOR
903B	84: FDTIMEOUTBLOCK	SET	*
903B 0000	85:	FDB	NEXTTIMEOUT timeout block for PerSci floppies
903D 0000	86:	FDB	0 fuse length
903F 8976	87:	FDB	PERSCI:TIMEOUT
0001	88: NTIMEOUTS	SET	NTIMEOUTS+1
903B	89: NEXTTIMEOUT	SET	FDTIMEOUTBLOCK
9043	90:	ORG	FDTIMEOUTBLOCK+TIMEOUT:SIZE
9043 0000	91:	FDB	0 current DCB
0002	92:	IF	DAMFLOPPY

MAL/6800 1.3F: 9043 SDOSDRIVERS
01/14/83 11:39:33; Page 86; Form 1
IOVFD.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** WORKING STORAGE ***

0002	94:	FIN	DAMFLOPPY	
	95:	FIN	PERSCI	
	96:	IF	DAMFLOPPY	
	97: *		DAM Floppy Controller	
	98:			
9045	99: CCB:DAMFLOPPY			
9045 01	100:	FCB	1	controller busy: 0 = yes, (>0 = no
9046 FF80	101:	FDB	%FF80	address
9048 00	102:	FCB	0	timeout counter
9049 FF	103:	FCB	%FF	drive to access
904A FF	104:	FCB	%FF	cylinder to access
904B FF	105:	FCB	%FF	last cylinder accessed
904C 86C7	106:	FDB	DISKINTSTARTDAMFLOPPY	
904E 7E88EB	107:	JMP	DAMFLOPPY:STATUS	
9051 7E8914	108:	JMP	DAMFLOPPY:RESET	
9054 7E88FF	109:	JMP	DAMFLOPPY:ABORT	
9057 7E88F2	110:	JMP	DAMFLOPPY:RESTORE	
905A 7E8918	111:	JMP	DAMFLOPPY:SETSEEK	
905D 7E891B	112:	JMP	DAMFLOPPY:SEEK	
9060 7E893B	113:	JMP	DAMFLOPPY:READSECTOR	
9063 7E8952	114:	JMP	DAMFLOPPY:WRITESECTOR	
9066 7E892E	115:	JMP	DAMFLOPPY:VERIFYSECTOR	
9069	116: FDTIMEOUTBLOCK	SET	*	
9069 9038	117:	FDB	NEXTTIMEOUT	timeout block for PerSci floppies
906B 0000	118:	FDB	0	fuse length
906D 897B	119:	FDB	DAMFLOPPY:TIMEOUT	
0002	120: NTIMEOUTS	SET	NTIMEOUTS+1	
9069	121: NEXTTIMEOUT	SET	FDTIMEOUTBLOCK	
9071	122:	ORG	FDTIMEOUTBLOCK+TIMEOUT:SIZE	
9071 0000	123:	FDB	0	current DCB
	124:	FIN	DAMFLOPPY	

MAL/6800 1.3F: 9071 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 87; Form 1 *** WORKING STORAGE ***
IOVFD.ASM

126: INCLUDE IOVFDDCBS.ASM

0001	1:	IFUND :DCBNUMBER	
0006	2:	NDISKDCBS SET	NDISKDCBS+PERSCI*WMFORMAT+PERSCI*IBMFORMAT+DAMFLOPPY
9073	3:	NEXTDISKDCB SET	*
0000	4:	:DRIVENUMBER SET	0
0000	5:	:DCBNUMBER SET	0
0002	6:	:DAMFLOPPY SET	DAMFLOPPY
0002	7:	:PERSCI SET	PERSCI
9073	8:	:HEADCHAIN SET	*
0000	9:	:NEXTCHAIN SET	0
0002	10:	IF PERSCI	
0001	11:	:WMFORMAT SET	WMFORMAT
0001	12:	:IBMFORMAT SET	IBMFORMAT
	13:	FIN PERSCI	
0003	14:	ELSE	
	24:	FIN :DCBNUMBER	

MAL/6800 1.3F: 9071 SDDSDRIVERS
 01/14/83 11:39:33; Page 88; Form 1
 IDVFDDCBS.ASM

*** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SFTWARE DYNAMICS ***
 *** WORKING STORAGE ***

```

0002      26:      IF      :DAMFLOPPY
          27: *      DAM Floppy
          28:
0100      29: :BPS      SET   256      bytes per sector
0012      30: :SPT      SET   18      sectors per track
0001      31: :TPC      SET    1      tracks per cylinder
0028      32: :CYL      SET   40      cylinders
0000      33: :DATA      SET    0      don't complement data
0000      34: :FIRST     SET    0      first sector
9045      35: :CONTROLLER SET      CCB:DAMFLDPY
0003      36:      ELSEIF      :PERSCI
          62:      FIN      :DAMFLOPPY
          63:
          64: *      Device Control Block
          65:
9073      66: :DCB      SET   *
005B      68:      RPT      FDSIZE      clear dcb
9073 00    69:      FCB      0
9073      71:      DRG      :DCB
9073 01    72:      FCB      1
9074 00000000 73:      FDB      0,0,0,FDDRIVER
907C 01000012 74:      FDB      :BPS,:SPT,:TPC,:CYL
90B6      75:      DRG      :DCB+FDDSTATEJ
90B6 7E875E 76:      JMP      DISKINTUNEXPECTED
90BB      77:      DRG      :DCB+FDDRIVE
90BB 00FF    78:      FCB      :DRIVENUMBER,$FF
90BE      79:      DRG      :DCB+FDCOMPLEMENT
90BE 0000    80:      FCB      :DATA,:FIRST
90C0 90730000 81:      FDB      :HEADCHAIN,0
90C4 9045    82:      FDB      :CONTROLLER
90C6      83:      DRG      :DCB+FDHMAPALG
90C6 0001    84:      FDB      1      set mapalgorithm intially to 1
90CE      85:      DRG      :DCB+FDHMAP
0012      87:      RPT      :SPT
90CE 00    88:      FCB      *-( :DCB+FDHMAP)
90E0      90: ::      SET      *
9076      91:      DRG      :DCB+DCB:NAME
9076 90E0    92:      FDB      ::
90E0      93:      DRG      ::
0000      94:      IF      :DCBNUMBER>9
          96:      ELSE
90E0 44303A00 97:      FCB      'D,'0+:DCBNUMBER,':',0
          98:      FIN      :DCBNUMBER>9

```


MAL/6800 1.3F: 90E0 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 89; Form 1 *** WORKING STORAGE ***
IQVFDDCBS.ASM

```
0001      100: :DCBNUMBER      SET          :DCBNUMBER+1
0001      101: :DRIVENUMBER    SET          :DRIVENUMBER+1
0001      102:      IF          &:NEXTCHAIN
0001      103: :NEXTCHAIN      SET          1
          104:      FIN          &:NEXTCHAIN
0000      105:      IF          :DRIVENUMBER&Z10
          143:      FIN          :DRIVENUMBER&Z10
0004      144:      IF          :PERSCI+:DAMFLOPPY
          145:      INCLUDE      IQVFDDCBS.ASM
0000      1:      IFUND :DCBNUMBER
          14:      ELSE
90E4      15: ::      SET      *
9078      16:      ORG      :DCB+DCB:NEXTDCB
9078 90E4 17:      FDB      ::
90E4      18:      ORG      ::
0001      19:      IF          :NEXTCHAIN
90C2      20:      ORG      :DCB+FDNEXTCHAIN
90C2 90E4 21:      FDB      ::
90E4      22:      ORG      ::
          23:      FIN          :NEXTCHAIN
          24:      FIN          :DCBNUMBER
```

MAL/6800 1.3F: 90C2 SDOSDRIVERS
01/14/83 11:39:33; Page 90; Form 1
IDVFDDCBS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** WORKING STORAGE ***

```
0002      26:      IF      :DAMFLOPPY
          27: *      DAM Floppy
          28:
0100      29: :BPS      SET   256      bytes per sector
0012      30: :SPT      SET   18      sectors per track
0001      31: :TPC      SET   1      tracks per cylinder
0028      32: :CYL      SET   40      cylinders
0000      33: :DATA      SET   0      don't complement data
0000      34: :FIRST     SET   0      first sector
9045      35: :CONTROLLER SET      CCB:DAMFLOPPY
0004      36:      ELSEIF      :PERSCI
          62:      FIN      :DAMFLOPPY
          63:
          64: *      Device Control Block
          65:
90E4      66: :DCB      SET   *
005B      68:      RPT      FDSIZE      clear dcb
90E4 00    69:      FCB      0
90E4      71:      ORG      :DCB
90E4 01    72:      FCB      1
90E5 00000000 73:      FDB      0,0,0,FDDRIVER
90ED 01000012 74:      FDB      :BPS,:SPT,:TPC,:CYL
9127      75:      ORG      :DCB+FDDSTATEJ
9127 7E875E 76:      JMP      DISKINTUNEXPECTED
912C      77:      ORG      :DCB+FDDRIVE
912C 01FF   78:      FCB      :DRIVENUMBER,$FF
912F      79:      ORG      :DCB+FDCOMPLEMENT
912F 0000   80:      FCB      :DATA,:FIRST
9131 90730000 81:      FDB      :HEADCHAIN,0
9135 9045   82:      FDB      :CONTROLLER
9137      83:      ORG      :DCB+FDHAPALG
9137 0001   84:      FDB      1      set mapalgorithm initially to 1
913F      85:      ORG      :DCB+FDHAP
0012      87:      RPT      :SPT
913F 00    88:      FCB      *-( :DCB+FDHAP)
9151      90: ::      SET      *
90E7      91:      ORG      :DCB+DCB:NAME
90E7 9151   92:      FDB      ::
9151      93:      ORG      ::
0000      94:      IF      :DCBNUMBER>9
          96:      ELSE
9151 44313A00 97:      FCB      'D,'0+:DCBNUMBER,':',0
          98:      FIN      :DCBNUMBER>9
```

MAL/6800 1.3F: 9151 SDOSDRIVERS
01/14/83 11:39:33; Page 91; Form 1
IOVFDDCBS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** WORKING STORAGE ***

```
0002      100: :DCBNUMBER      SET          :DCBNUMBER+1
0002      101: :DRIVENUMBER    SET          :DRIVENUMBER+1
0000      102:      IF      &:NEXTCHAIN
0000      104:      FIN      &:NEXTCHAIN
0002      105:      IF      :DRIVENUMBER&Z10
0002      106:      IF      :DAMFLOPPY
0000      107: :DAMFLOPPY      SET          :DAMFLOPPY-2
0001      108:      IF      :DAMFLOPPY<1
0000      109: :DRIVENUMBER    SET          0
0000      110:      FIN      :DAMFLOPPY<1
0001      111:      IF      :NEXTCHAIN
0000      112: :NEXTCHAIN      SET          0
0000      113:      FIN      :NEXTCHAIN
9155      114: :HEADCHAIN      SET          *
0005      115:      ELSEIF          :PERSCI
0005      142:      FIN      :DAMFLOPPY
0005      143:      FIN      :DRIVENUMBER&Z10
0002      144:      IF      :PERSCI+:DAMFLOPPY
0000      145:      INCLUDE          IOVFDDCBS.ASM
0000      1:      IFUND :DCBNUMBER
0000      14:      ELSE
9155      15: ::      SET      *
90E9      16:      ORG      :DCB+DCB:NEXTDCB
90E9 9155 17:      FDB      ::
9155      18:      ORG      ::
0000      19:      IF      :NEXTCHAIN
0000      23:      FIN      :NEXTCHAIN
0000      24:      FIN      :DCBNUMBER
```

IOVFDDCBS.ASM

```

0000      26:      IF      :DAMFLDPY
0002      36:      ELSEIF      :PERSCI
0001      37:      IF      :IBMFORMAT
          38: *      IBM Disk
          39:
0080      40: :BPS      SET      128      bytes per sector
001A      41: :SPT      SET      26      sectors per track
0001      42: :TPC      SET      1      tracks per cylinder
004D      43: :CYL      SET      77      cylinders
0001      44: :DATA      SET      1      complement data
0001      45: :FIRST     SET      1      first sector
9017      46: :CONTROLLER SET      CCB:PERSCI
0006      47:      ELSEIF      :WMFORMAT
          59:      FIN      :IBMFORMAT
0005      60:      ELSE
          62:      FIN      :DAMFLOPPY
          63:
          64: *      Device Control Block
          65:
9155      66: :DCB      SET      *
005B      68:      RPT      FDSIZE      clear dcb
9155 00    69:      FCB      0
9155      71:      ORG      :DCB
9155 01    72:      FCB      1
9156 00000000 73:      FDB      0,0,0,FDDRIVER
915E 0080001A 74:      FDB      :BPS,:SPT,:TPC,:CYL
9198      75:      DRG      :DCB+FDDSTATEJ
9198 7E875E 76:      JMP      DISKINTUNEXPECTED
919D      77:      DRG      :DCB+FDDRIVE
919D 00FF    78:      FCB      :DRIVENUMBER,%FF
91A0      79:      ORG      :DCB+FDCCOMPLEMENT
91A0 0101    80:      FCB      :DATA,:FIRST
91A2 91550000 81:      FDB      :HEADCHAIN,0
91A6 9017    82:      FDB      :CONTRDLLER
91A8      83:      ORG      :DCB+FDHAPALG
91A8 0001    84:      FDB      1      set mapalgorithm intially to 1
91B0      85:      DRG      :DCB+FDHAP
001A      87:      RPT      :SPT
91B0 00      88:      FCB      *-( :DCB+FDHAP)
91CA      90: ::      SET      *
915B      91:      ORG      :DCB+DCB:NAME
915B 91CA    92:      FDB      ::
91CA      93:      DRG      ::
0000      94:      IF      :DCBNUMBER>9
          96:      ELSE
91CA 44323A00 97:      FCB      'D,'0+:DCBNUMBER,':',0
          98:      FIN      :DCBNUMBER>9

```

MAL/6800 1.3F: 91CA SDOSEDRIVERS *** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 93; Form 1 *** WORKING STORAGE ***
 IOVFDDCBS.ASM

```

0003      100: :DCBNUMBER      SET          :DCBNUMBER+1
0001      101: :DRIVENUMBER    SET          :DRIVENUMBER+1
0001      102:      IF      &:NEXTCHAIN
0001      103: :NEXTCHAIN      SET          1
          104:      FIN      &:NEXTCHAIN
0000      105:      IF      :DRIVENUMBER&Z10
          143:      FIN      :DRIVENUMBER&Z10
0002      144:      IF      :PERSCI+:DAMFLOPPY
          145:      INCLUDE      IOVFDDCBS.ASM
0000      1:      IFUND :DCBNUMBER
          14:      ELSE
91CE      15: ::      SET      *
915A      16:      ORG      :DCB+DCB:NEXTDCB
915A 91CE 17:      FDB      ::
91CE      18:      ORG      ::
0001      19:      IF      :NEXTCHAIN
91A4      20:      ORG      :DCB+FDNEXTCHAIN
91A4 91CE 21:      FDB      ::
91CE      22:      ORG      ::
          23:      FIN      :NEXTCHAIN
          24:      FIN      :DCBNUMBER

```

MAL/6800 1.3F: 91A4 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 94; Form 1 *** WORKING STORAGE ***
 IOVFDDCBS.ASM

```

0000      26:      IF      :DAMFLOPPY
0002      36:      ELSEIF                      :PERSCI
0001      37:      IF      :IBMFORMAT
          38: *      IBM Disk
          39:
0080      40: :BPS      SET      128          bytes per sector
001A      41: :SPT      SET      26          sectors per track
0001      42: :TPC      SET      1          tracks per cylinder
004D      43: :CYL      SET      77          cylinders
0001      44: :DATA      SET      1          complement data
0001      45: :FIRST     SET      1          first sector
9017      46: :CONTROLLER SET          CCB:PERSCI
0007      47:      ELSEIF                      :WMFORMAT
          59:      FIN      :IBMFORMAT
0006      60:      ELSE
          62:      FIN      :DAMFLOPPY
          63:
          64: *      Device Control Block
          65:
91CE      66: :DCB      SET      *
005B      68:      RPT      FDSIZE          clear dcb
91CE 00    69:      FCB      0
91CE      71:      ORG      :DCB
91CE 01    72:      FCB      1
91CF 00000000 73:      FDB      0,0,0,FDDRIVER
91D7 0080001A 74:      FDB      :BPS,:SPT,:TPC,:CYL
9211      75:      ORG      :DCB+FDDSTATEJ
9211 7E875E 76:      JMP      DISKINTUNEXPECTED
9216      77:      ORG      :DCB+FDDRIVE
9216 01FF    78:      FCB      :DRIVENUMBER,$FF
9219      79:      ORG      :DCB+FDCCOMPLEMENT
9219 0101    80:      FCB      :DATA,:FIRST
921B 91550000 81:      FDB      :HEADCHAIN,0
921F 9017    82:      FDB      :CONTROLLER
9221      83:      ORG      :DCB+FDMAPALG
9221 0001    84:      FDB      1          set mapalgorithm initially to 1
9229      85:      ORG      :DCB+FDMAP
001A      87:      RPT      :SPT
9229 00      88:      FCB      *-(:DCB+FDMAP)
9243      90: ::      SET      *
91D1      91:      ORG      :DCB+DCB:NAME
91D1 9243    92:      FDB      ::
9243      93:      ORG      ::
0000      94:      IF      :DCBNUMBER>9
          96:      ELSE
9243 44333A00 97:      FCB      'D,'0+:DCBNUMBER,':',0
          98:      FIN      :DCBNUMBER>9

```

MAL/6800 1.3F: 9243 SDO5DRIVERS *** SDO5 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 95; Form 1 *** WORKING STORAGE ***
 IOVFDDCBS.ASM

```

0004      100: :DCBNUMBER      SET          :DCBNUMBER+1
0002      101: :DRIVENUMBER    SET          :DRIVENUMBER+1
0000      102:      IF      &:NEXTCHAIN
0000      104:      FIN      &:NEXTCHAIN
0002      105:      IF      :DRIVENUMBER&X10
0000      106:      IF      :DAMFLOPPY
0002      115:      ELSEIF          :PERSCI
0001      116:      IF      :IBMFORMAT
0000      117: :IBMFORMAT      SET          0
0001      118:      IF      :WMFORMAT
0000      119: :DRIVENUMBER    SET          :DRIVENUMBER-2
0009      120:      ELSE
0000      130:      FIN      :WMFORMAT
0008      131:      ELSEIF          :WMFORMAT
0000      141:      FIN      :IBMFORMAT
0000      142:      FIN      :DAMFLOPPY
0000      143:      FIN      :DRIVENUMBER&X10
0002      144:      IF      :PERSCI+:DAMFLOPPY
0000      145:      INCLUDE          IOVFDDCBS.ASM
0000      1:      IFUND :DCBNUMBER
0000      14:      ELSE
9247      15: ::      SET      *
91D3      16:      ORG      :DCB+DCB:NEXTDCB
91D3 9247 17:      FDB      ::
9247      18:      ORG      ::
0001      19:      IF      :NEXTCHAIN
921D      20:      ORG      :DCB+FDNEXTCHAIN
921D 9247 21:      FDB      ::
9247      22:      ORG      ::
0000      23:      FIN      :NEXTCHAIN
0000      24:      FIN      :DCBNUMBER

```

MAL/6800 1.3F: 921D SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 96; Form 1 *** WORKING STORAGE ***
 IOVFDDCBS.ASM

```

0000      26:      IF      :DAMFLOPPY
0002      36:      ELSEIF                      :PERSCI
0000      37:      IF      :IBMFORMAT
0001      47:      ELSEIF                      :WMFORMAT
          48:      Wavemate Disk
          49:
0100      50: :BPS      SET      256          bytes per sector
0010      51: :SPT      SET      16          sectors per track
0001      52: :TPC      SET      1          tracks per cylinder
004D      53: :CYL      SET      77          cylinders
0000      54: :DATA      SET      0          don't complement data
0000      55: :FIRST     SET      0          first sector
9017      56: :CONTROLLER SET          CCB:PERSCI
0008      57:      ELSE
          59:      FIN      :IBMFORMAT
0007      60:      ELSE
          62:      FIN      :DAMFLOPPY
          63:
          64:      Device Control Block
          65:
9247      66: :DCB      SET      *
005B      68:      RPT      FDSIZE          clear dcb
9247 00    69:      FCB      0
          71:      ORG      :DCB
9247 01    72:      FCB      1
9248 00000000 73:      FDB      0,0,0,FDDRIVER
9250 01000010 74:      FDB      :BPS,:SPT,:TPC,:CYL
          75:      ORG      :DCB+FDDSTATEJ
928A 7EB75E   76:      JMP      DISKINTUNEXPECTED
          77:      ORG      :DCB+FDDRIVE
928F 00FF     78:      FCB      :DRIVENUMBER,%FF
          79:      ORG      :DCB+FDCCOMPLEMENT
9292 0000     80:      FCB      :DATA,:FIRST
9294 91550000 81:      FDB      :HEADCHAIN,0
9298 9017     82:      FDB      :CONTROLLER
          83:      ORG      :DCB+FDMAPALG
929A 0001     84:      FDB      1          set mapalgorithm intially to 1
          85:      ORG      :DCB+FDMAP
          87:      RPT      :SPT
92A2 00       88:      FCB      *-( :DCB+FDMAP)
          90:      SET      *
          91:      ORG      :DCB+DCB:NAME
924A 92B2     92:      FDB      ::
          93:      ORG      ::
          94:      IF      :DCBNUMBER>9
          96:      ELSE
92B2 44343A00 97:      FCB      'D,'0+:DCBNUMBER,':',0
          98:      FIN      :DCBNUMBER>9

```


MAL/6800 1.3F: 92B2 SDOSDRIVERS
01/14/83 11:39:33; Page 97; Form 1
IOVFDDCBS.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** WORKING STORAGE ***

```
0005      100: :DCBNUMBER      SET      :DCBNUMBER+1
0001      101: :DRIVENUMBER    SET      :DRIVENUMBER+1
0000      102:      IF      &:NEXTCHAIN
          104:      FIN      &:NEXTCHAIN
0000      105:      IF      :DRIVENUMBER&Z10
          143:      FIN      :DRIVENUMBER&Z10
0002      144:      IF      :PERSCI+:DAMFLOPPY
          145:      INCLUDE      IOVFDDCBS.ASM
0000      1:      IFUND :DCBNUMBER
          14:      ELSE
92B6      15: ::      SET      *
924C      16:      ORG      :DCB+DCB:NEXTDCB
924C 92B6 17:      FDB      ::
92B6      18:      ORG      ::
0001      19:      IF      :NEXTCHAIN
9296      20:      ORG      :DCB+FDNEXTCHAIN
9296 92B6 21:      FDB      ::
92B6      22:      ORG      ::
          23:      FIN      :NEXTCHAIN
          24:      FIN      :DCBNUMBER
```

MAL/6800 1.3F: 9296 SDOSEDRIVERS *** SDO I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 98; Form 1 *** WORKING STORAGE ***
 IOVFDDCRS.ASM

```

0000      26:      IF      :DAMFLOPPY
0002      36:      ELSEIF           :PERSCI
0000      37:      IF      :IBMFORMAT
0001      47:      ELSEIF           :WMFORMAT
          48:      Wavemate Disk
          49:
0100      50: :BPS      SET  256      bytes per sector
0010      51: :SPT      SET  16      sectors per track
0001      52: :TPC      SET  1      tracks per cylinder
004D      53: :CYL      SET  77      cylinders
0000      54: :DATA      SET  0      don't complement data
0000      55: :FIRST     SET  0      first sector
9017      56: :CONTROLLER SET      CCB:PERSCI
0009      57:      ELSE
          59:      FIN      :IBMFORMAT
000B      60:      ELSE
          62:      FIN      :DAMFLOPPY
          63:
          64:      Device Control Block
          65:
92B6      66: :DCB      SET  *
005B      68:      RPT      FDSIZE      clear dcb
92B6 00    69:      FCB      0
          71:      ORG      :DCB
92B6 01    72:      FCB      1
92B7 00000000 73:      FDB      0,0,0,FDDRIVER
92B8 01000010 74:      FDB      :BPS,:SPT,:TPC,:CYL
          75:      ORG      :DCB+FDDSTATEJ
92F9 7E875E 76:      JMP      DISKINTUNEXPECTED
          77:      ORG      :DCB+FDDRIVE
92FE 01FF    78:      FCB      :DRIVENUMBER,%FF
          79:      ORG      :DCB+FDCCOMPLEMENT
9301 0000    80:      FCB      :DATA,:FIRST
9303 91550000 81:      FDB      :HEADCHAIN,0
9307 9017    82:      FDB      :CONTROLLER
          83:      ORG      :DCB+FDMAPALG
9309 0001    84:      FDB      1      set mapalgorithm initially to 1
          85:      ORG      :DCB+FDMAP
          87:      RPT      :SPT
9311 00      88:      FCB      *-( :DCB+FDMAP)
          90:      SET      *
          91:      ORG      :DCB+DCB:NAME
92B9 9321    92:      FDB      ::
          93:      ORG      ::
          94:      IF      :DCBNUMBER>9
          96:      ELSE
9321 44353A00 97:      FCB      'D,'0+:DCBNUMBER,' ',0
          98:      FIN      :DCBNUMBER>9

```

MAL/6800 1.3F: 9321 SDOOSDRIVERS
01/14/83 11:39:33; Page 99; Form 1
IOVFDDCBS.ASM

*** SDOOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** WORKING STORAGE ***

```
0006      100: :DCBNUMBER      SET              :DCBNUMBER+1
0002      101: :DRIVENUMBER    SET              :DRIVENUMBER+1
0000      102:      IF      &:NEXTCHAIN
          104:      FIN      &:NEXTCHAIN
0002      105:      IF      :DRIVENUMBER&X10
0000      106:      IF      :DAMFLOPPY
0002      115:      ELSEIF              :PERSCI
0000      116:      IF      :IBMFORMAT
0001      131:      ELSEIF              :WMFORMAT
0000      132: :PERSCI SET      :PERSCI-2
0000      133:      IF      :PERSCI
          140:      FIN      :PERSCI
          141:      FIN      :IBMFORMAT
          142:      FIN      :DAMFLOPPY
          143:      FIN      :DRIVENUMBER&X10
0000      144:      IF      :PERSCI+:DAMFLOPPY
          146:      FIN      :PERSCI+:DAMFLOPPY
          147:
          148:
          146:      FIN      :PERSCI+:DAMFLOPPY
          147:
          148:
          146:      FIN      :PERSCI+:DAMFLOPPY
          147:
          148:
          146:      FIN      :PERSCI+:DAMFLOPPY
          147:
          148:
          146:      FIN      :PERSCI+:DAMFLOPPY
          147:
          148:
          146:      FIN      :PERSCI+:DAMFLOPPY
          147:
          148:
          127:      FIN      IOERRAM
0000      128:      IF      IOERRAMINIT
          172:      FIN      IOERRAMINIT
0000      173:      IF      IOERRAMBODY
          410:      FIN      IOERRAMBODY
0000      411:      IF      IOERRAMPOLL
          434:      FIN      IOERRAMPOLL
0000      435:      IF      IOERRAMBODY
          995:      FIN      IOERRAMBODY
          996:
          997:
          602:      FIN
0001      603:      IF      STOREDEMON
          604:      INCLUDE              IOSTOREDEMON.ASM
0000      1:      IF      IOERRAMBODY
          781:      FIN      IOERRAMBODY
0000      782:      IF      IOERRAMPOLL
          807:      FIN      IOERRAMPOLL
0000      808:      IF      IOERRAMINIT
          833:      FIN      IOERRAMINIT
0001      834:      IF      IOERRAM
```

MAL/6800 1.3F: 9325 SDOSDRIVERS
01/14/83 11:39:33; Page 100; Form 1
IOSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** STORAGE DEMON WORKING RAM ***

9325 01	836: WDCINTERFACE	FCB	1	; WDC CONTROLLER IS AVAILABLE
9326 0000	837: WDCDCBPINTER	FDB	0	; CURRENT UNIT IN USE BY INTERRUPT ROUTINES
9328 8C66	838: WDCCONTINUEPC	FDB	WDCINTUNEXPECTED	; WHERE TO GO WHEN TRANSFER DONE INTERRUPT
932A 00	839: WDCCOUNT	FCB	0	; COUNTS # OF 8 BYTE BLOCKS TO XFER TO 7710
932B 0000	840: WDCPOINTER	FDB	0	; POINTER TO NEXT BLOCK OF 8 BYTES TO XFER
932D 00	841: WDCRETRYCNT	FCB	0	; USED TO COUNT # OF READ/WRITE ATTEMPTS
	842:			
932E 01	843: WDC1DCB	FCB	1	DCB:DONEFLAG
932F 0000	844:	FDB	0	DCB:LASTERROR
9331 9372	845:	FDB	WDC1STR	
9333 9073	846:	FDB	NEXTDISKDCB	DCB:NEXT
9335 89C4	847:	FDB	WDCDRIVER	DCB:DRIVER
9337 0200	848:	FDB	WDCNBPS	
9339 4E34	849:	FDB	WDCNSPT	DSKINFO:NSPT
933B 0001	850:	FDB	WDCNTPC	DSKINFO:NTPC
933D 0001	851:	FDB	WDCNCYL	DSKINFO:NCYL
0031	852:	RPT	WDC1DCB+DSKINFO:SIZE-1	
933F 00	853:	FCB	0	
9370 00	854:	FCB	0	WDCREADWRITE: 2 IS READ 3 IS WRITE ETC.
9371 01	855:	FCB	1	DRIVE SELECT 1
9372 5744313A	856: WDC1STR	FCC	'WD1:'	
9376 00	857:	FCB	0	
932E	858: NEXTDISKDCB	SET	WDC1DCB	
0007	859: NDISKDCBS	SET	NDISKDCBS+1	
	860:			
9377 01	861: WDCODCB	FCB	1	DCB:DONEFLAG
9378 0000	862:	FDB	0	DCB:LASTERROR
937A 93BB	863:	FDB	WDCOSTR	
937C 932E	864:	FDB	NEXTDISKDCB	DCB:NEXT
937E 89C4	865:	FDB	WDCDRIVER	DCB:DRIVER
9380 0200	866:	FDB	WDCNBPS	
9382 4E34	867:	FDB	WDCNSPT	DSKINFO:NSPT
9384 0001	868:	FDB	WDCNTPC	DSKINFO:NTPC
9386 0001	869:	FDB	WDCNCYL	DSKINFO:NCYL
0031	870:	RPT	WDCODCB+DSKINFO:SIZE-1	
9388 00	871:	FCB	0	
93B9 00	872:	FCB	0	WDCREADWRITE: CONTAINS DESIRED DISK OPCODE
93BA 00	873:	FCB	0	DRIVE 0
93BB 5744303A	874: WDCOSTR	FCC	'WD0:'	
93BF 00	875:	FCB	0	
9377	876: NEXTDISKDCB	SET	WDCODCB	
0008	877: NDISKDCBS	SET	NDISKDCBS+1	
	878:			
93C0 9069	879: WDCTIMEOUTBLOCK	FDB	NEXTTIMEOUT	
93C2 0000	880: WDCTIMEOUTCOUNT	FDB	0	
93C4 8CF2	881:	FDB	WDCTIMEOUT	
	882:			
	883: *			
93C0	884: NEXTTIMEOUT	SET	WDCTIMEOUTBLOCK	
0003	885: NTIMEOUTS	SET	NTIMEOUTS+1	
	886:	FIN	IODRIVERRAM	
	887:	END	; UNEXPECTED EOF	
	885:	FIN		
	886:	INCLUDE	IOVTCNFIG.ASM	
0000	1:	if	iodriverbody	

MAL/6800 1.3F: 93C4 SDDSDRIVERS
01/14/83 11:39:33; Page 101; Form 1
IOVTCNF16.ASM

*** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** STORAGE DEMON WORKING RAM ***

	30:	fin	iadriverbody
0000	31:	if	iadriverinit
	39:	fin	iadriverinit
0000	40:	if	iadriverbody
	57:	fin	iadriverbody
0000	58:	if	iadriverinit
	66:	fin	iadriverinit
0000	67:	if	iadriverbody
	84:	fin	iadriverbody
0000	85:	if	iadriverinit
	93:	fin	iadriverinit
0000	94:	if	iadriverbody
	111:	fin	iadriverbody
0000	112:	if	iadriverpoll
	193:	fin	iadriverpoll
0001	194:	if	iadriverram
0009	195: ntimeouts	set	6+ntimeouts

```
93C6      197: ttybuffers
0001      198:          ifund   outbufsize:$FFC0
0050      199: outbufsize:$FFC0 equ    80
          200:          fin
0001      201:          ifund   linebufsize:$FFC0
0064      202: linebufsize:$FFC0 equ    100
          203:          fin
0001      204:          ifund   inbufsize:$FFC0
0050      205: inbufsize:$FFC0  equ    80
          206:          fin
          207: ; inbufsize should be less than linebufsize, in order to
          208: ; avoid too long typed-ahead line
93C6      209: outbuf:$FFC0
93C6 0050 210:          rmb     outbufsize:$FFC0
9416      211: inbuf:$FFC0
9416 0050 212:          rmb     inbufsize:$FFC0
9466      213: linebuf:$FFC0
9466 0064 214:          rmb     linebufsize:$FFC0
0001      215:          ifund   outbufsize:$FFC4
0050      216: outbufsize:$FFC4 equ    80
          217:          fin
0000      218:          ifund   linebufsize:$FFC4
          220:          fin
0000      221:          ifund   inbufsize:$FFC4
          223:          fin
          224: ; inbufsize should be less than linebufsize, in order to
          225: ; avoid too long typed-ahead line
94CA      226: outbuf:$FFC4
94CA 0050 227:          rmb     outbufsize:$FFC4
951A      228: inbuf:$FFC4
951A 0000 229:          rmb     inbufsize:$FFC4
951A      230: linebuf:$FFC4
951A 0000 231:          rmb     linebufsize:$FFC4
0001      232:          ifund   outbufsize:$FFC8
0050      233: outbufsize:$FFC8 equ    80
          234:          fin
0001      235:          ifund   linebufsize:$FFC8
0064      236: linebufsize:$FFC8 equ    100
          237:          fin
0001      238:          ifund   inbufsize:$FFC8
0050      239: inbufsize:$FFC8  equ    80
          240:          fin
          241: ; inbufsize should be less than linebufsize, in order to
          242: ; avoid too long typed-ahead line
951A      243: outbuf:$FFC8
951A 0050 244:          rmb     outbufsize:$FFC8
956A      245: inbuf:$FFC8
956A 0050 246:          rmb     inbufsize:$FFC8
95BA      247: linebuf:$FFC8
95BA 0064 248:          rmb     linebufsize:$FFC8
```

MAL/6800 1.3F: 95BA SDOSDRIVERS
 01/14/83 11:39:33; Page 103; Form 1
 IOVTCONFIG.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 VT DCBs

961E	250:	dcbname:\$FFC0	
961E 434F4E53	251:	fcc	/CONSOLE:/
9626 00	252:	fcdb	0
0001	253:	ifund	ttydcb
9627	254:	ttydcb	
	255:	fin	ttydcb
9627	256:	dcb:\$FFC0	
00FD	257:	rpt	dcb:vtsize
9627 00	258:	fcdb	0
962A	259:	org	dcb:\$FFC0+dcb:name
962A 961E	260:	fdb	dcbname:\$FFC0
962C 9763	261:	fdb	dcb:\$FFC4
962E BDE2	262:	fdb	sdas+sdas:vtdispatch
96DC	263:	org	dcb:\$FFC0+dcb:reset
96DC 7E9E4B	264:	jmp	reset:\$FFC0
96DF 0C39	265:	akrts	dump nothing
0001	266:	if	m6800!m6801
96E1 01	267:	nap	
	268:	fin	
96E2 7E8D13	269:	jmp	ilputdev:\$FFC0
96E5 7E8D1C	270:	jmp	ilgetdev:\$FFC0
96E8 7E8ED8	271:	jmp	illdeviceop no extra control calls defined
96EB 7E8ED8	272:	jmp	illdeviceop no extra status calls defined
96EE 7E8D25	273:	jmp	tlcheckready:\$FFC0 go check for acia ready
96C8	274:	org	dcb:\$FFC0+dcb:outputtblk
0001	275:	ifund	ttytimeouts
96C8	276:	ttytimeouts	
	277:	fin	ttytimeouts
96C8	278:	outputtblk:\$FFC0	
96C8 96D0	279:	fdb	inputtblk:\$FFC0
96CA 0000	280:	fdb	0
96CC 8DD9	281:	fdb	sdas+sdas:vtoutputto
96CE 9627	282:	fdb	dcb:\$FFC0
96D0	283:	org	dcb:\$FFC0+dcb:inputtblk
96D0	284:	inputtblk:\$FFC0	
96D0 9804	285:	fdb	outputtblk:\$FFC4
96D2 0000	286:	fdb	0
96D4 8DD6	287:	fdb	sdas+sdas:vtinputto
96D6 9627	288:	fdb	dcb:\$FFC0
96D8	289:	org	dcb:\$FFC0+dcb:tcb
96D8 9724	290:	fdb	tcb:\$FFC0
96DA	291:	org	dcb:\$FFC0+dcb:taskstack
96DA 9756	292:	fdb	tcbstack:\$FFC0
9674	293:	org	dcb:\$FFC0+dcb:ringinbase
9674 9416	294:	fdb	inbuf:\$FFC0
9676 0050	295:	fdb	inbufsize:\$FFC0
9680	296:	org	dcb:\$FFC0+dcb:ringoutbase
9680 93C6	297:	fdb	outbuf:\$FFC0
9682 0050	298:	fdb	outbufsize:\$FFC0
9684	299:	org	dcb:\$FFC0+dcb:ringoutthreshold
9684 08	300:	fcdb	outbufsize:\$FFC0//10
968E	301:	org	dcb:\$FFC0+dcb:linebuf
968E 9466	302:	fdb	linebuf:\$FFC0
96A1	303:	org	dcb:\$FFC0+dcb:linebuflen
96A1 64	304:	fcdb	linebufsize:\$FFC0

MAL/6800 1.3F: 96A1 SDOSDRIVERS
 01/14/83 11:39:33; Page 104; Form 1
 IOVTCNF16.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 VT DCBs

96F1	305:	org	dcb:\$FFC0+dcb:clearin
96F1 7EBDBB	306:	jmp	sdos+sdos:vtclearin
96F4 7EBDBB	307:	jmp	sdos+sdos:vtclearout
96F7 7EBDBE	308:	jmp	sdos+sdos:vttilputbuf
96FA 7EBDC1	309:	jmp	sdos+sdos:vttilgetbuf
96FD 7EBDC4	310:	jmp	sdos+sdos:vttilputbuf
9700 7EBDC7	311:	jmp	sdos+sdos:vttilgetbuf
964F	312:	org	dcb:\$FFC0+dcb:profile
964F 01	313:	fcbl	profilenum.MALVT profile name
9627	314:	org	dcb:\$FFC0+dcb:doneflag
9627 01	315:	fcbl	1 device not busy
963A	316:	org	dcb:\$FFC0+dcb:oilquiescent
963A 01	317:	fcbl	1 interrupt not expected
9724	318:	org	dcb:\$FFC0+dcb:vtsize
0001	319:	ifund	ttytcb
9724	320:		ttytcb
	321:	fin	ttytcb
9724	322:		tcb:\$FFC0
9724 9860	323:	fdb	tcb:\$FFC4
9726 9756	324:	fdb	tcbstack:\$FFC0
972B 00000000	325:	fdb	0,0,0,0,0,0
9732	326:	org	tcb:\$FFC0+tcb:scratchpad+dcbpointer
9732 9627	327:	fdb	dcb:\$FFC0
9734	328:	org	tcb:\$FFC0+tcb:size
9734 0022	329:	rmb	env:minstack*2-env:size
9756	330:		tcbstack:\$FFC0
000B	331:	rpt	env:size
9756 00	332:	fcbl	0
975D	333:	org	*-env:cc
975D	334:		stack:\$FFC0
975C	335:	org	tcbstack:\$FFC0+env:p
975C BDCA	336:	fdb	sdos+sdos:vtedittask
9757	337:	org	tcbstack:\$FFC0+env:cc
9757 00	338:	fcbl	\$80!m6809 set 'E' flag for 6809
975E	339:	org	stack:\$FFC0+env:cc
975E	340:		dcbname:\$FFC4
975E 4C50543A	341:	fcc	/LPT:/
9762 00	342:	fcbl	0
0000	343:	ifund	ttydcb
	345:	fin	ttydcb
9763	346:		dcb:\$FFC4
00FD	347:	rpt	dcb:vtsize
9763 00	348:	fcbl	0
9766	349:	org	dcb:\$FFC4+dcb:name
9766 975E	350:	fdb	dcbname:\$FFC4
9768 98A2	351:	fdb	dcb:\$FFC8
976A BDE2	352:	fdb	sdos+sdos:vtdispatch
9818	353:	org	dcb:\$FFC4+dcb:reset
9818 7E9E5A	354:	jmp	reset:\$FFC4
981B 0C39	355:	okrts	dump nothing
0001	356:	if	m6800!m6801
981D 01	357:	nop	
	358:	fin	
981E 7E8D2C	359:	jmp	ilputdev:\$FFC4
9821 7E8D35	360:	jmp	ilgetdev:\$FFC4

9824 7EBEDB	361:	jmp	illdeviceop	no extra control calls defined
9827 7EBEDB	362:	jmp	illdeviceop	no extra status calls defined
982A 7EBD3E	363:	jmp	tlcheckready:\$FFC4	go check for acia ready
9804	364:	org	dcb:\$FFC4+dcb:outputtblk	
0000	365:	ifund	ttytimeouts	
	367:	fin	ttytimeouts	
9804	368:		outputtblk:\$FFC4	
9804 980C	369:	fdb	inputtblk:\$FFC4	
9806 0000	370:	fdb	0	
9808 BDD9	371:	fdb	sdos+sdos:vtoutputto	
980A 9763	372:	fdb	dcb:\$FFC4	
980C	373:	org	dcb:\$FFC4+dcb:inputtblk	
980C	374:		inputtblk:\$FFC4	
980C 9943	375:	fdb	outputtblk:\$FFC8	
980E 0000	376:	fdb	0	
9810 BDD6	377:	fdb	sdos+sdos:vtinputto	
9812 9763	378:	fdb	dcb:\$FFC4	
9814	379:	org	dcb:\$FFC4+dcb:tcbl	
9814 9860	380:	fdb	tcbl:\$FFC4	
9816	381:	org	dcb:\$FFC4+dcb:taskstack	
9816 9892	382:	fdb	tcblstack:\$FFC4	
97B0	383:	org	dcb:\$FFC4+dcb:ringinbase	
97B0 951A	384:	fdb	inbuf:\$FFC4	
97B2 0000	385:	fdb	inbufsize:\$FFC4	
97BC	386:	org	dcb:\$FFC4+dcb:ringoutbase	
97BC 94CA	387:	fdb	outbuf:\$FFC4	
97BE 0050	388:	fdb	outbufsize:\$FFC4	
97C0	389:	org	dcb:\$FFC4+dcb:ringoutthreshold	
97C0 08	390:	fdb	outbufsize:\$FFC4//10	
97CA	391:	org	dcb:\$FFC4+dcb:linebuf	
97CA 951A	392:	fdb	linebuf:\$FFC4	
97DD	393:	org	dcb:\$FFC4+dcb:linebuflen	
97DD 00	394:	fdb	linebufsize:\$FFC4	
982D	395:	org	dcb:\$FFC4+dcb:clearin	
982D 7EBDB8	396:	jmp	sdos+sdos:vtclearin	
9830 7EBDB8	397:	jmp	sdos+sdos:vtclearout	
9833 7EBDBE	398:	jmp	sdos+sdos:vttlputbuf	
9836 7EBDC1	399:	jmp	sdos+sdos:vttlgetbuf	
9839 7EBDC4	400:	jmp	sdos+sdos:vttilputbuf	
983C 7EBDC7	401:	jmp	sdos+sdos:vttilgetbuf	
97BB	402:	org	dcb:\$FFC4+dcb:profile	
97BB 09	403:	fdb	profilenum.MALLPT profile name	
9763	404:	org	dcb:\$FFC4+dcb:doneflag	
9763 01	405:	fdb	1 device not busy	
9776	406:	org	dcb:\$FFC4+dcb:oilquiescent	
9776 01	407:	fdb	1 interrupt not expected	
9860	408:	org	dcb:\$FFC4+dcb:vtsize	
0000	409:	ifund	ttytcb	
	411:	fin	ttytcb	
9860	412:		tcbl:\$FFC4	
9860 999F	413:	fdb	tcbl:\$FFC8	
9862 9892	414:	fdb	tcblstack:\$FFC4	
9864 00000000	415:	fdb	0,0,0,0,0,0	
986E	416:	org	tcbl:\$FFC4+tcbl:scratchpad+dcbpointer	
986E 9763	417:	fdb	dcb:\$FFC4	

MAL/6800 1.3F: 986E SDOSDRIVERS
01/14/83 11:39:33; Page 104; Form 1
10VTCNFIG.ASM

*** SDOS I/O drivers for WaveMate Jupiter 11 (C) 1978 SOFTWARE DYNAMICS ***
VT DCBs

9870	418:	org	tcb:\$FFC4+tcb:size
9870 0022	419:	rmb	env:minstack*2-env:size
9892	420:		tcbstack:\$FFC4
0008	421:	rpt	env:size
9892 00	422:	fcdb	0
9899	423:	org	*-env:cc
9899	424:		stack:\$FFC4
9898	425:	org	tcbstack:\$FFC4+env:p
9898 BDCB	426:	fdb	sdos+sdos:vtedittask
9893	427:	org	tcbstack:\$FFC4+env:cc
9893 00	428:	fcdb	\$80!m6809 set 'E' flag for 6809
989A	429:	org	stack:\$FFC4+env:cc
989A	430:		dcbname:\$FFC8
989A 48595459	431:	fcc	/HYTYPE:/
98A1 00	432:	fcdb	0
0000	433:	ifund	ttydcb
	435:	fin	ttydcb
98A2	436:		dcb:\$FFC8
00FD	437:	rpt	dcb:vtsize
98A2 00	438:	fcdb	0
98A5	439:	org	dcb:\$FFC8+dcb:name
98A5 989A	440:	fdb	dcbname:\$FFC8
98A7 8FEB	441:	fdb	nextdevicedcb
98A9 BDE2	442:	fdb	sdos+sdos:vtdispatch
9957	443:	org	dcb:\$FFC8+dcb:reset
9957 7E9E69	444:	jmp	reset:\$FFC8
995A 0C39	445:	akrts	dump nothing
0001	446:	if	m6800!m6801
995C 01	447:	nop	
	448:	fin	
995D 7E8D45	449:	jmp	ilputdev:\$FFC8
9960 7E8D4E	450:	jmp	ilgetdev:\$FFC8
9963 7E8EDB	451:	jmp	illdeviceop no extra control calls defined
9966 7E8EDB	452:	jmp	illdeviceop no extra status calls defined
9969 7E8D57	453:	jmp	tlcheckready:\$FFC8 go check for acia ready
9943	454:	org	dcb:\$FFC8+dcb:outputtblk
0000	455:	ifund	ttytimeouts
	457:	fin	ttytimeouts
9943	458:		outputtblk:\$FFC8
9943 994B	459:	fdb	inputtblk:\$FFC8
9945 0000	460:	fdb	0
9947 BDD9	461:	fdb	sdos+sdos:vtoutputto
9949 98A2	462:	fdb	dcb:\$FFC8
994B	463:	org	dcb:\$FFC8+dcb:inputtblk
994B	464:		inputtblk:\$FFC8
994B 93C0	465:	fdb	nexttimeout
98C8	466:	set	ttytimeouts
994D 0000	467:	fdb	0
994F BDD6	468:	fdb	sdos+sdos:vtinputto
9951 98A2	469:	fdb	dcb:\$FFC8
9953	470:	org	dcb:\$FFC8+dcb:tcb
9953 999F	471:	fdb	tcb:\$FFC8
9955	472:	org	dcb:\$FFC8+dcb:taskstack
9955 99D1	473:	fdb	tcbstack:\$FFC8
98EF	474:	org	dcb:\$FFC8+dcb:ringinbase

MAL/6800 1.3F: 98EF SDOSDRIVERS
 01/14/83 11:39:33; Page 107; Form 1
 IOVTCNFI6.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 VT DCBs

98EF 956A	475:	fdb	inbuf:\$FFC8
98F1 0050	476:	fdb	inbufsize:\$FFC8
98FB	477:	org	dcb:\$FFC8+dcb:ringoutbase
98FB 951A	478:	fdb	outbuf:\$FFC8
98FD 0050	479:	fdb	outbufsize:\$FFC8
98FF	480:	org	dcb:\$FFC8+dcb:ringoutthreshold
98FF 08	481:	fcdb	outbufsize:\$FFC8//10
9909	482:	org	dcb:\$FFC8+dcb:linebuf
9909 95BA	483:	fdb	linebuf:\$FFC8
991C	484:	org	dcb:\$FFC8+dcb:linebuflen
991C 64	485:	fcdb	linebufsize:\$FFC8
996C	486:	org	dcb:\$FFC8+dcb:clearin
996C 7EBDB8	487:	jmp	sdos+sdos:vtclearin
996F 7EBDB8	488:	jmp	sdos+sdos:vtclearout
9972 7EBDB8E	489:	jmp	sdos+sdos:vttlputbuf
9975 7EBDC1	490:	jmp	sdos+sdos:vttlgetbuf
9978 7EBDC4	491:	jmp	sdos+sdos:vtilputbuf
997B 7EBDC7	492:	jmp	sdos+sdos:vtilgetbuf
98CA	493:	org	dcb:\$FFC8+dcb:profile
98CA 01	494:	fcdb	profilenum.MALVT profile name
98A2	495:	org	dcb:\$FFC8+dcb:doneflag
98A2 01	496:	fcdb	1 device not busy
98B5	497:	org	dcb:\$FFC8+dcb:oilquiescent
98B5 01	498:	fcdb	1 interrupt not expected
999F	499:	org	dcb:\$FFC8+dcb:vtsize
0000	500:	ifund	ttytcb
	502:	fin	ttytcb
999F	503:	tcb:\$FFC8	
999F 0000	504:	fdb	nexttcb
99A1 99D1	505:	fdb	tcbstack:\$FFC8
99A3 00000000	506:	fdb	0,0,0,0,0,0
99AD	507:	org	tcb:\$FFC8+tcb:scratchpad+dcb:pointer
99AD 98A2	508:	fdb	dcb:\$FFC8
99AF	509:	org	tcb:\$FFC8+tcb:size
99AF 0022	510:	rmb	env:minstack*2-env:size
99D1	511:	tcbstack:\$FFC8	
0008	512:	rpt	env:size
99D1 00	513:	fcdb	0
99D8	514:	org	*-env:cc
99D8	515:	stack:\$FFC8	
99D7	516:	org	tcbstack:\$FFC8+env:p
99D7 BDCA	517:	fdb	sdos+sdos:vtedittask
99D2	518:	org	tcbstack:\$FFC8+env:cc
99D2 00	519:	fcdb	\$801m6809 set 'E' flag for 6809
99D9	520:	org	stack:\$FFC8+env:cc
	521:	fin	iodriverram
	522:		
	523:		
9377	607:	DISKDCBS SET	NEXTDISKDCB
0008	608:	NDRIVES SET	NDISKDCBS
8FEB	609:	DEVICEDCBS SET	NEXTDEVICEDCB
96C8	610:	TIMEOUTQUEUE SET	NEXTTIMEOUT
0009	611:	NTIMEOUTBLOCKS SET	NTIMEOUTS
9724	612:	TASKQUEUE EQU	TTYTCB
8DFB	613:	PROFILECHAIN EQU	NEXTDPB

```

        615: *
        616: *      FCBS (MUST PRECEDE IOCBS)
        617: *
02A4    618: FCBS    RPT    FCB:SIZE*(NIOCHANNELS+2*NDRIVES+NMAGICFCBS)
99D9 00  619:      FCB    0
        620: *
        621: *      IOCBS
        622: *
0110    623: IOCBS    RPT    IOCB:SIZE*NIOCHANNELS
9C7D 00  624:      FCB    0
0008    625: IOCBPOINTERS RPT      NIOCHANNELS
9D8D 9C7D 626:      FDB    IOCBS+IOCB:SIZE*(*-IOCBPOINTERS)/2
        628: *
9D9D    629: INTERRUPTSTACK EQU * ; STACK SPACE FOR INTERRUPT ROUTINES
        630:
9D9D DEFE 631: INTSETUP LDX    SYSP6
9D9F 868F 632:      LDAA  #(STACKUNSWITCHEDDEVICEPOLL)/256 = WHERE TO GO ON INTERRUPT
9DA1 C618 633:      LDAB  #(STACKUNSWITCHEDDEVICEPOLL)\256
9DA3 A7FE 634:      STAA  SYSIIRQ+1,X
9DA5 E7FF 635:      STAB  SYSIIRQ+2,X
9DA7 0C39 636:      DKRTS
        637:
003A    638:      RPT    INTERRUPTSTACKSIZE-(*-INTERRUPTSTACK)
9DA9 00  639:      FCB    0
        640:
9DE3    641: INTERRUPTSTACKEND ; end of interruptstack

```

10JUPITER.ASM

```

0000      643: IODRIVERRAM SET 0
0001      644: IODRIVERINIT SET 1
19E3      645: EQU *-DRIVERBASE SIZE OF READ-ONLY CODE
9DE3      646: DSKBUFFERPOOL EQU *
0001      647: IF CLOCK
          648: INCLUDE IOCLOCK.ASM

0000      1: IF IODRIVERBODY
          201: FIN IODRIVERBODY
0000      202: IF IODRIVERRAM
          228: FIN IODRIVERRAM
          229:
          230:
          649: FIN
0000      650: IF BLACKHOLE
          652: FIN
0000      653: IF SDLP
          655: FIN
0001      656: IF VIRTUALFLOPPY
          657: INCLUDE IOVFD.ASM

0000      1: IF IODRIVERBODY
          57: FIN IODRIVERBODY
0000      58: IF IODRIVERRAM
          127: FIN IODRIVERRAM
0001      128: IF IODRIVERINIT
9DE3      129: FDRESTORE
9DE3 CE0C39 130: LDX #OKRTS do the following once only
9DE6 FF9DE3 131: STX FDRESTORE
9DE9 CE0000 132: LDX #0 reset the PIA(s)
0002      133: IF PERSCI
9DEC FFFFA0 134: STX PERSCI:PIACA
          135: FIN PERSCI
0002      136: IF DAMFLOPPY
9DEF FFFFB0 137: STX DAMFLOPPY:PIACA
          138: FIN DAMFLOPPY
9DF2 CEFFFF 139: LDX #FFFF
0002      140: IF PERSCI
9DF5 FFFFA2 141: STX PERSCI:PIADA
9DF8 86A5 142: LDAA #A5 see if Persci controller exists
9DFA 87FFA2 143: STAA PERSCI:PIADA
9DFD 40 144: NEGA
9DFE BBFFA2 145: ADDA PERSCI:PIADA gives zero IFF Persci exists
9E01 40 146: NEGA gives carry IFF Persci exists
9E02 8600 147: LDAA #0 form Persci Interrupt Test mask
9E04 46 148: RORA (A)=80 --> Persci exists
9E05 B7BFC3 149: STAA PERSCIINTERRUPTMASK
          150: FIN PERSCI
0002      151: IF DAMFLOPPY
9E08 FFFFB2 152: STX DAMFLOPPY:PIADA
9E0B 86A5 153: LDAA #A5 see if DAM Floppy controller exists
9E0D B7FFB2 154: STAA DAMFLOPPY:PIADA
9E10 40 155: NEGA
9E11 BBFFB2 156: ADDA DAMFLOPPY:PIADA gives zero IFF DAM Floppy exists
9E14 40 157: NEGA gives carry IFF DAM Floppy exists
9E15 8600 158: LDAA #0 form DAM Floppy Interrupt Test mask
9E17 46 159: RORA (A)=80 --> DAM Floppy exists
    
```

ERA #180

Does not

MAL/6800 1.3F: 9E18 SDO3DRIVERS
01/14/83 11:39:33; Page 10; Form 1
IOVFD.ASM

*** SDO3 I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
*** DRIVER INIT (ONCE-ONLY) CODE ***

```
9E18 B78FD3 160: STAA DAMFLOPPYINTERRUPTMASK
161: FIN DAMFLOPPY
9E18 CE2C07 162: LDX #X0010110000000111
0002 163: IF PERSCI
9E1E FFFFA0 164: STX PERSCI:PIACA
9E21 B6FFA3 165: LDAA PERSCI:PIADB clear possible interrupt
166: FIN PERSCI
0002 167: IF DAMFLOPPY
9E24 FFFFB0 168: STX DAMFLOPPY:PIACA
9E27 B6FFB3 169: LDAA DAMFLOPPY:PIADB clear possible interrupt
170: FIN DAMFLOPPY
9E2A 0C39 171: OKRTS
172: FIN IO DRIVER INIT
0000 173: IF IO DRIVER BODY
410: FIN IO DRIVER BODY
0000 411: IF IO DRIVER POLL
434: FIN IO DRIVER POLL
0000 435: IF IO DRIVER BODY
995: FIN IO DRIVER BODY
996:
997:
658: FIN
0001 659: IF STOREDEMON
660: INCLUDE IOSTOREDEMON.ASM
0000 1: IF IO DRIVER BODY
781: FIN IO DRIVER BODY
0000 782: IF IO DRIVER POLL
807: FIN IO DRIVER POLL
0001 808: IF IO DRIVER INIT
9E2C 809: WDCINIT ;LDX #OKRTS INITIALIZE 7710 INTELLIGENT CONTROLLER
9E2C CE0C39 810: LDX #OKRTS
9E2F FF9E2C 811: STX WDCINIT SO WE DON'T DO THIS MORE THAN ONCE!
812: ;JMP WDCRESET INITIALIZE 7710 INTELLIGENT CONTROLLER
9E32 7E8A36 813: JMP WDCRESET
0001 814: IF USEDEMONASCLOCK
9E35 815: CLOCKRESET
816: ;LDD #2*16666 ASSUME 2MHZ CPU
9E35 C634 817:28 LDAB #(2*16666)&#xFF
9E37 B682 818:39 LDAA #(2*16666)/256
819: ;STB VIATILL ; SET INTERVAL IN LOW LATCH
9E39 F7FF44 820: STAB VIATILL
821: ;STA VIATICH ; LOAD HIGH LATCH AND INTO COUNTER
9E3C B7FF45 822: STAA VIATICH
823: ;LDA #X01000000
9E3F B640 824: LDAA #X01000000
825: ;STA VIAACR ; SET CONTINUOUS INTERRUPTS FROM COUNTER
9E41 B7FF4B 826: STAA VIAACR
827: ;LDA #X11000000
9E44 B6C0 828: LDAA #X11000000
829: ;STA VIAIER ; ENABLE INTERRUPT REQUEST FROM CLOCK
9E46 B7FF4E 830: STAA VIAIER
9E49 0C39 831: OKRTS
832: FIN USEDEMONASCLOCK
833: FIN IO DRIVER INIT
0000 834: IF IO DRIVER RAM
```

*(16666/100 * CPU speed)*

*IF JUPITER USE
DIFFERENT VALUE
(850 KC CLOCK)*

MAL/6800 1.3F: 9E49 SDOSDRIVERS
 01/14/83 11:39:33; Page 111; Form 1
 IOSTOREDEMON.ASM

*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 *** DRIVER INIT (ONCE-ONLY) CODE ***

```

      886:      FIN      IODRIVERERRAM
      887:      END      ;UNEXPECTED EOF
      661:      FIN
      662:      INCLUDE      IOVTCONFIG.ASM

0000      1:      if      iodriverbody
           30:      fin      iodriverbody
0001      31:      if      iodriverinit
9E4B      32:      reset:$FFC0
9E4B 8603      33:      ldaa    #Z00000011      reset ACIA
9E4D B7FFC0      34:      staa    $FFC0
9E50 8695      35:      ldaa    #Z10010101      in int; 8 D + 1 S; no parity; /16
9E52 B7FFC0      36:      staa    $FFC0
9E55 B6FFC1      37:      ldaa    $FFC1      clear any input interrupt
9E5B 0C39      38:      okrts
           39:      fin      iodriverinit
0000      40:      if      iodriverbody
           57:      fin      iodriverbody
0001      58:      if      iodriverinit
9E5A      59:      reset:$FFC4
9E5A 8603      60:      ldaa    #Z00000011      reset ACIA
9E5C B7FFC4      61:      staa    $FFC4
9E5F 8695      62:      ldaa    #Z10010101      in int; 8 D + 1 S; no parity; /16
9E61 B7FFC4      63:      staa    $FFC4
9E64 B6FFC5      64:      ldaa    $FFC5      clear any input interrupt
9E67 0C39      65:      okrts
           66:      fin      iodriverinit
0000      67:      if      iodriverbody
           84:      fin      iodriverbody
0001      85:      if      iodriverinit
9E69      86:      reset:$FFC8
9E69 8603      87:      ldaa    #Z00000011      reset ACIA
9E6B B7FFC8      88:      staa    $FFC8
9E6E 8695      89:      ldaa    #Z10010101      in int; 8 D + 1 S; no parity; /16
9E70 B7FFC8      90:      staa    $FFC8
9E73 B6FFC9      91:      ldaa    $FFC9      clear any input interrupt
9E76 0C39      92:      okrts
           93:      fin      iodriverinit
0000      94:      if      iodriverbody
           111:      fin      iodriverbody
0000      112:      if      iodriverpoll
           193:      fin      iodriverpoll
0000      194:      if      iodriversram
           521:      fin      iodriversram
           522:
           523:

```

MAL/6800 1.3F: 9E76 SDOSDRIVERS *** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
01/14/83 11:39:33; Page 112; Form 1 *** DRIVER INIT (ONCE-ONLY) CODE ***
IQJUPITER.ASM

```
0000      664:      IF    *>/VTDRIVER
          666:      ELSE
9E7B 078B      667:      RMB   VTDRIVER-*
          668:      FIN    *>/VTDRIVER
081D      669: DSKPOOLSIZE EQU          *-DSKBUFFERPOOL
0000      670:      IF    DESIREDPOOLSIZE>>DSKPOOLSIZE
          672:      FIN
2200      673:      EQU    *-CODE          SO I CAN SEE HOW BIG THE WORLD IS
0000      674:      END
```


NAL/6800 1.3F: 9E78 SDO5DRIVERS *** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
 01/14/83 11:39:33; Page 113; Form 1 Symbols Sorted by Name
 IOJUPITER.ASM
 Symbols Sorted by Name:

```

:/:9321      :BPS/0100      :CONTROLLER/9017      :CYL/004D      :DAMFLOPPY/0000      :DATA/0000
:DCB/92B6    :DCBNUMBER/0006      :DRIVENUMBER/0002      :FIRST/0000      :HEADCHAIN/9155
:IBMFORMAT/0000      :NEXTCHAIN/0001      :PERSCI/0000      :SPT/0010      :TPC/0001      :WMFORMAT/0001
*ALTERPROFILE:CLIDLES/000D      *ALTERPROFILE:CLLEN/000B      *ALTERPROFILE:CLSEQ/0009      *ALTERPROFILE:COLDISP/0007
*ALTERPROFILE:CPIDLES/0005      *ALTERPROFILE:CPLN/0000      *ALTERPROFILE:CPSEQ/0001      *ALTERPROFILE:EEDOLIDLES/0013
*ALTERPROFILE:EEOLEN/000E      *ALTERPROFILE:EEOSEQ/000F      *ALTERPROFILE:ROWDISP/0006      *ALTERPRFILE:SIZE/0014
*ASCII:ACK/0006 *ASCII:BEL/0007      *ASCII:BS/000B      *ASCII:CAN/0018      *ASCII:CR/000D      *ASCII:DC1/0011      *ASCII:DC2/0012      *ASCII:DC3/0013
*ASCII:DC4/0014 *ASCII:DLE/0010      *ASCII:EM/0019      *ASCII:END/0005      *ASCII:EOT/0004      *ASCII:ESC/001B      *ASCII:ETB/0017      *ASCII:ETX/0003
*ASCII:FF/000C *ASCII:FS/001C      *ASCII:GS/001D      *ASCII:HT/0009      *ASCII:LF/000A      *ASCII:MASK/007F      *ASCII:NAK/0015
*ASCII:NULL/0000      *ASCII:RS/001E      *ASCII:RUDDUT/007F      *ASCII:SI/000F      *ASCII:SD/000E      *ASCII:SOH/0001
*ASCII:SPACE/0020      *ASCII:STX/0002      *ASCII:SUB/001A      *ASCII:SYN/0016      *ASCII:US/001F      *ASCII:VT/000B
BADINTERRUPTCOUNT/8FE9      *BASICFLAGS/00F0      BCDTASC/84FE      BLACKHOLE/0000      *BDOT:PARAMSIZE/0007
*BUILDMAP/85CF      BUILDMAP1/85D4      BUILDMAP2/85D8      BUILDMAP3/85DD      BUILDMAP4/85E9      *CC:ACTIVATIONCK/001D
*CC:ALTERPRDFILE/0019      *CC:BACKGROUND/0021      *CC:CLRINPUT/0015      *CC:CLROUTPUT/0016
*CC:COLDRING/0020      *CC:DEVICESPECIFICOP/0010      *CC:DISMOUNTDISK/0011      *CC:DUMPBUFFERS/0001
*CC:ECHO/0010      *CC:FDRMAT/0015      *CC:IDLES/0012      *CC:KILLENABLE/0023      *CC:KILLPROOF/0022
*CC:MULTISECTORREAD/0013      *CC:MULTISECTORWRITE/0014      *CC:NDECHD/0011      *CC:NDWRAP/001F      *CC:POSITION/0000
*CC:POSITIONTOEND/0013      *CC:SETACTBLDCK/0014      *CC:SETEXCEPTION/0032      *CC:SETFIELDSize/001B
*CC:SETFILEDATE/0010      *CC:SETFILEPRDT/0011      *CC:SETFILESIZE/0012      *CC:SETMAPALGORITHM/0012
*CC:SETPARAMS/001C      *CC:SETPROFILE/0018      *CC:SETREADTIMEOUT/0017      *CC:SETTIMESHARE/0031
*CC:TABS/0013      *CC:UNLOCKDISK/0010      *CC:WAITDONE/0016      *CC:WRAP/001E      *CC:WRITEANDWAIT/0030
*CC:WRITEANDWAIT/0033      *CC:WRITEEDITLINE/001A      *CCB:ABORT/000F      *CCB:ADDR/0001      *CCB:BUSY/0000      *CCB:CURRENDCB/002
*CCB:CYL/0005      *CCB:DAMFLOPPY/9045      *CCB:DRIVE/0004      *CCB:LASTCYL/0006      *CCB:PERSCI/9017
*CCB:READSECTOR/001B      *CCB:RESET/000C      *CCB:RESTORE/0012      *CCB:SEEK/0018      *CCB:SETSEEK/0015
*CCB:SIZE/002E      *CCB:STARTID/0007      *CCB:STATUS/0009      *CCB:TIMEOUT/0003      *CCB:TIMEOUTBLK/002
*CCB:VERIFYSECTOR/0021      *CCB:WRITESECTOR/001E      *CHANGED/0000      *CHECKDISKREADY/8762      *CLOCK/0001
CLOCKBUFFER/8FF4      *CLOCKCLOSE/842F      *CLOCKDATE/84D7      *CLOCKDCB/8FEB      *CLOCKDRIVER/8415
*CLOCKFRACTION/8FFA      *CLOCKGETTD/84B9      *CLOCKGETTD1/84C0      *CLOCKGETTD2/84CD
CLOCKMAKEXX/8522      *CLOCKOPEN/842F      *CLOCKPFRESTART/842F      *CLOCKRA1/84A6      *CLOCKRB1/8475      *CLOCKRB2/8484
CLOCKREADA/848D      *CLOCKREADB/8469      *CLOCKRESET/9E35      *CLOCKSPRUNG/8431
CLOCKSTATUS/8434      *CLOCKSTR/8FFB      *CLOCKTIME/850A      *CLOCKWB1/8451      *CLOCKWB2/845F      *CLOCKWRITEB/8448
*CNFG:ATTNCHECK/000B      *CNFG:DEBUGGER/000D      *CNFG:DEVIDCBS/0002      *CNFG:DISKDCBS/0000
*CNFG:DRIVERBASE/000F      *CNFG:DSKBUFFERPOOL/0007      *CNFG:DSKPOOLSIZE/0009      *CNFG:INTDISABLE/0013
*CNFG:INTENABLE/0016      *CNFG:INTERRUPTSTACK/001C      *CNFG:INTRTI/0019      *CNFG:INTSETUP/0011
*CNFG:IOCBPOINTERS/0004      *CNFG:IOINTPOLL/001E      *CNFG:MTPRIMS/002B      *CNFG:NIOCHANNELS/0006
*CNFG:TASKQUEUE/0020      *CNFG:TIMEDUTLIST/0022      *CNFG:VTDEBUG/0026      *CNFG:VTPRDFILES/0024
*CNFG:VTSIZE/002A      *CNFGTABLE/8EB1      *CODE/8400      *COLORING:H19/8E8E      *COLORING:H19REVERSEVIDEO/8E9A
CONRAC/0000      *CONTEXTBLOCK:SIZE/0007      *COPYDCBTCCB/8845      *COUNTCOMMAND/881B      *DAMFLOPPY/0002
DAMFLOPPY:ABORT/88FF      *DAMFLOPPY:ABORT.RTS/8913      *DAMFLOPPY:ISSUECOMMAND/88F9      *DAMFLOPPY:PIACA/FF80
DAMFLOPPY:PIACB/FF81      *DAMFLOPPY:PIADA/FF82      *DAMFLOPPY:PIADB/FF83      *DAMFLOPPY:READSECTOR/8938
DAMFLOPPY:READSECTOR.1/894F      *DAMFLOPPY:READSECTOR.2/8945      *DAMFLOPPY:RESET/8914      *DAMFLOPPY:RESTORE/88F2
DAMFLOPPY:SEEK/891B      *DAMFLOPPY:SETSEEK/8918      *DAMFLOPPY:STATUS/88EB      *DAMFLOPPY:TIMEOUT/897B
DAMFLOPPY:VERIFYSECTOR/892E      *DAMFLOPPY:WDCMDSTS/FF84      *DAMFLOPPY:WDDATA/FF87      *DAMFLOPPY:WDSECTOR/FF86
DAMFLOPPY:WDTRACK/FF85      *DAMFLOPPY:WRITESECTOR/8952      *DAMFLOPPY:WRITESECTOR.1/8973      *DAMFLOPPY:WRITESECTOR.2/8965
DAMFLOPPYINTERRUPTMASK/8FD3      *DATE/84D5      *DATE#/900B      *DATE#:DAY/900E      *DATE#:MONTH/900B      *DATE#:YEAR/9011
DAY/8FF7      *DCB:$FFC0/9627      *DCB:$FFC4/9763      *DCB:$FFC8/98A2      *DCB:ACTCOL/007B      *DCB:ACTDISP/007C
*DCB:ACTIVATION/00ED      *DCB:BACKGROUND/0078      *DCB:BEEPCOUNT/005E      *DCB:CALLERIOCB/0086
*DCB:CALLERSCB/0026      *DCB:CLEAR/0094      *DCB:CLEARIDLES/009B      *DCB:CLEARIN/00CA      *DCB:CLEAROUT/00CD
*DCB:CLEARS/0093      *DCB:COL/006E      *DCB:COLCT/000D      *DCB:COLDISP/0092      *DCB:COLORING/0076
*DCB:CONTROL/00C1      *DCB:CTLCCOUNT/000E      *DCB:CTLCKILL/0075      *DCB:CURLORST/006C
*DCB:DISPLAYDEPTH/006A      *DCB:DISPLAYWIDTH/0069      *DCB:DONEFLAG/0000      *DCB:DRIVER/0007
*DCB:EDITFLAGS/0009      *DCB:EEDL/009A      *DCB:EEDOLIDLES/009E      *DCB:EEDLSL/0099      *DCB:ENDCOL/006B
*DCB:EXCEPT/0082      *DCB:FIELDEND/0074      *DCB:FIELDWIDTH/008B      *DCB:IDLECOUNT/00A0

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IOJUPITER.ASM

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*DCB:IDLETRIGGER/009F      *DCB:IILLFLGS/0012      *DCB:IILSPL/0011      *DCB:ILDATA/0062
*DCB:ILGETBUF/00D9        *DCB:ILGETDEV/00BE      *DCB:ILPUTBUF/00D6    *DCB:ILPUTDEV/00BB
*DCB:ILRDM/00B0          *DCB:ILSW/000C   DCB:INPUTDBLK/00A9      *DCB:ISDEVICEREADY/00C7      DCB:LASTERROR/0001
  DCB:LINEBUF/0067        *DCB:LINEBUFCUNT/0066      DCB:LINEBUFLN/007A      *DCB:LINEBUFTR/000F
*DCB:LINEFLGS/005F        DCB:NAME/0003   *DCB:NEWSTATUS/0079      DCB:NEXTDCB/0005
  DCB:DILQUIESCENT/0013   *DCB:DPENCUNT/00B5      DCB:DUTPUTDBLK/00A1    *DCB:POSN/00BC   *DCB:POSNIDLES/0090
*DCB:POSNSL/00BB         *DCB:PRDCESSID/00B3      DCB:PRDFILE/0028      *DCB:READAERR/0072
*DCB:READCOL/006F        *DCB:READPERIDD/00B9    *DCB:REMINDERS/000A    DCB:RESET/00B5   DCB:RINGINBASE/004
*DCB:RINGINDATA/0047     *DCB:RINGINFETCH/0045   *DCB:RINGINLEN/004F    *DCB:RINGINRDM/004B
*DCB:RINGINSTDRE/0049    DCB:RINGOUTBASE/0059    *DCB:RINGOUTDATA/0053  *DCB:RINGOUTFETCH/0051
*DCB:RINGOUTLEN/005B     *DCB:RINGOUTRDM/0057    *DCB:RINGOUTSTDRE/0055  DCB:RINGOUTTHRESHOLD/005D
*DCB:RDW/006D   *DCB:RDWCT/0071   *DCB:RDWDISP/0091      *DCB:SCB/0014   DCB:SIZE/0009      *DCB:STATUS/00C4
*DCB:TABS/00DC   DCB:TASKSTACK/00B3      DCB:TCB/00B1          DCB:TLBUFFER/007D      *DCB:TLCLDSEDEV/00BB
*DCB:TLDATA/0060        *DCB:TLGETBUF/00D3      *DCB:TLPUTBUF/00D0      *DCB:TLRDM/0064
  DCB:VTSIZE/00FD        *DCB:WELFLGS/000B      *DCB:WELPDS/0070      DCB:XLATESTATE/003D
*DCBEDITFLGS:ACTIVATE/0010 *DCBEDITFLGS:ESC/0001   *DCBEDITFLGS:HCEDIT/0040 *DCBEDITFLGS:INTD/0020
*DCBEDITFLGS:KILLP/00B0  *DCBEDITFLGS:PAGE/000B  *DCBEDITFLGS:READB/0002 *DCBEDITFLGS:WRAP/0004
*DCBEXCEPT:SEDT/0001   *DCBIILLFLGS:CTLB/0020  *DCBIILLFLGS:CTLB/000B  *DCBIILLFLGS:CTLT/0040
*DCBIILLFLGS:CTLV/0010  *DCBIILLFLGS:ESC/00B0   *DCBIILSPL:CONTINUE/000B *DCBIILSPL:DISCARD/0004
*DCBIILSPL:FREEZE/0002  *DCBIILSPL:INTD/0020    *DCBIILSPL:PAGE/0001    *DCBILSW:ALPHALOCK/0001
*DCBILSW:CTLC/0002      *DCBILSW:HCFREEZE/00B0  *DCBILSW:DUTTD/0004      DCBNAME:$FFC0/961E
  DCBNAME:$FFC4/975E      DCBNAME:$FFC8/9B9A      DCBPDINTER/0006        *DCBREMINDERS:CTLD/000B
*DCBREMINDERS:CTLP/0004  *DCBREMINDERS:CTLS/0002  *DCBREMINDERS:INTD/0020  *DCBREMINDERS:RIP/0010
*DCBWELFLGS:ECHO/0020    *DCBWELFLGS:FLDE/000B   *DCBWELFLGS:FLDW/0004   *DCBWELFLGS:PREF/0001
*DCBWELFLGS:RETYPE/0002  DEBUGINTERRUPT/8410     DEBUGSYSCALLHANDLER/B407 DESIREDPDOLSIZE/0800
*DEVICEDCBS/8FEB        DISKABORT/876F   DISKCDMPL/B804   DISKCDMPLEMENT/87FB   DISKDCBS/9377   DISKDDNE/8751
  DISKDDNE1/8758   DISKDDNEJ/87EC   DISKDDNEJ1/87E5   DISKERRR/8741   DISKERRDR1/874D   DISKERRDRJ/87C1
  DISKINTCCB/9015   DISKINTDAMFLDPY.ND/8FDF   DISKINTDCB/9013      DISKINTERRUPT/86B5
  DISKINTPERSCI.ND/8FCF *DISKINTSERVICE/8FBF    DISKINTSETUP/86B9     DISKINTSTART/86CA
  DISKINTSTARTDAMFLDPY/86C7 DISKINTSTARTPERSCI/86C2 DISKINTUNEXPECTED/875E DISKREAD/87D4   DISKREAD1/87E1
  DISKREAD4/87EF   DISKSAVEERRLSN/87C4      DISKSEEKERROR/8735      DISKSETCYLADD/8774
  DISKSETCYLADD.1/8776 DISKTIMEDUT/897E      DISKTIMEDUT1/89A9      DISKTIMEDUT1A/89B6
  DISKTIMEDUT2/89C1   DISKTIMEDOUTERRDRED/8994 DISKWERR/873B   DISKWRITE/8780   DISKWRITE2/8791
  DISKWRITE3/87A3     DISKWRITE4/87A7      DISKWRITES/87B1      DIV60DIVIDEND/8FF4
  DIVIDE60L/8531   DIVIDE60L2/853A      DIVIDE60L3/8549      DIVIDEBY60/852E      DSSEK/885D
*DPB:DEFDEPTH/0005      *DPB:DEFWIDTH/0004      *DPB:DVTP/0001   *DPB:FLGS/0006   DPB:SPINIT/0015
*DPB:NEXT/0002   *DPB:OUTTD/0007   *DPB:PROFILE/0000      *DPB:SETBACKGROUND/0012      *DPB:SETCOLDRING/000F
  DPB:SIZE/001D   *DPB:TLPUTDEV/000C      *DPB:XLATEI/0009      *DPBFLGS:AUTONL/000B
*DPBFLGS:HCEDIT/0010    *DPBFLGS:MAL/0001      *DPBFLGS:DUTPUT/0002   *DPBFLGS:WRAP/0004
*DRIVER:CLOSE/0002      *DRIVER:CONTROL/0012    *DRIVER:CREATE/000C     *DRIVER:DELETE/0010
*DRIVER:DISKCONTRDL/000A *DRIVER:DISKREAD/0002   *DRIVER:DISKRESET/0000  *DRIVER:DISKSTATUS/000B
*DRIVER:DISKWAIT/0006   *DRIVER:DISKWRITE/0004  *DRIVER:DPEN/0000      DRIVER:PFRESTART/001A
*DRIVER:READA/0004      *DRIVER:READB/000B      *DRIVER:RENAME/000E     *DRIVER:RESET/0016
*DRIVER:STARTID/0018    *DRIVER:STATUS/0014     *DRIVER:WRITEA/0006     *DRIVER:WRITEB/000A
  DRIVERBASE/B400      DSKBUFFERPDDL/9DE3     *DSKINFO:BADLSN/002D    *DSKINFO:DIRFCB/0027
  DSKINFO:ERRLSN/003F   *DSKINFO:LOG2NBPS/001B   DSKINFO:MAPALGORITHM/0016 *DSKINFO:MAPFCB/0029
*DSKINFO:MAPLSN/0024    *DSKINFO:MIDALLDC/0014  *DSKINFO:MINALLDC/0012  *DSKINFO:NBPC/0020
  DSKINFO:NBPS/0009    *DSKINFO:NBPSH1/0019    *DSKINFO:NCYL/000F      *DSKINFO:NLCN/001E
*DSKINFO:NLSN/001B      DSKINFO:NSPC/0011      DSKINFO:NSPT/000B      *DSKINFO:NTPC/000D
  DSKINFO:DPSCUNT/003C  *DSKINFO:RANDMAP/0022   DSKINFO:READERRCNT/0038 DSKINFO:READERRSTS/003A
  DSKINFO:SECTDRDB/002B DSKINFO:SEEKERRCNT/0030 DSKINFO:SEEKERRSTS/0032 DSKINFO:SIZE/0042
  DSKINFO:WRITEERRCNT/0034 DSKINFO:WRITEERRSTS/0036 DSKPDOLSIZE/081D      *DV DAT:DEPTH/0001
  DV DAT:NBPS/0000     *DV DAT:NCYL/0006      *DV DAT:NSPC/0002      *DV DAT:NSPT/0002
*DV DAT:NTPC/0004      *DV DAT:WIDTH/0000      DV TYP.CLOCK/000B      DV TYP.CONSDLE/0004
*DV TYP.DISK/0001      *DV TYP.DTAPE/0003      *DV TYP.DUMMY/000A     *DV TYP.FILE/0000

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*DVTYP.PARIN/0009	*DVTYP.PAROUT/0008	DVTYP.PRINTER/0005	*DVTYP.SERIALIN/0007
*DVTYP.SERIALOUT/0006	*DVTYP.STAPE/0002	DVTYP.TYPE/0000	EDITDATE/1231 EDITYEAR/1982
*ENV:A/0003 *ENV:B/0002	ENV:CC/0001 ENV:MINSTACK/0015	ENV:P/0006	ENV:SIZE/0008 *ENV:X/0004
*ERR:ABNDRMALSTOP/0068	*ERR:ACTIVATIONNOTINBUFFER/0773	*ERR:ACTIVATIONRECEIVED/0775	*ERR:ALLDCOCLUSTERS/042B
*ERR:ATTENTION/0001	*ERR:BADCMDFORMAT/0066	*ERR:BADFILENAME/03FF	*ERR:BADFILEVERSION/0405
*ERR:BADFNAMESIZE/03F5	*ERR:BADLOADRECORD/040C	*ERR:BADPOSITION/03EC	*ERR:BDTCKSUMFAIL/03E8
*ERR:BRANCHFACTORSIZE/0435	*ERR:BUSYFDRANOTHERPROCESS/0772	*ERR:CANTGOTO/0067	*ERR:CANTOPENMUSTCREATE/03FD
*ERR:CHBUSY/0407	*ERR:CHTOOBIG/0406	*ERR:CLOSED/0408	*ERR:CLUSTERSIZELIMITSFILE/041C
*ERR:DECRYPTIDNKEYSDONTMATCH/0437	*ERR:DEVICEERRDRED/0421	ERR:DEVICENOTREADY/0424	
ERR:DEVICETIMEDOUT/0412	*ERR:DIRECTORYDAMAGED/040F	*ERR:DISKMDUNTED/03FC	ERR:DISKREAD/0415
ERR:DISKSEEK/0417	ERR:DISKWRITE/0416	*ERR:DISKWRITELCKED/0419	ERR:DSKWRTPROT/0418
*ERR:DUPLICATEKEY/0434	*ERR:ENDDFMEDIUM/042F	*ERR:EOFHIT/03E9	*ERR:FATALCOMPILE/0064
*ERR:FILEALREADYDELETED/042C	*ERR:FILEINCREATE/03FB	*ERR:FILEISDPEN/03EA	*ERR:FILENOTFOUND/03F3
*ERR:FILEWRTPROT/03F2	*ERR:HCSICTOOSMALL/0401	*ERR:IBUFDFVERFLOW/0410	ERR:ILLDEVICEBP/040A
*ERR:ILLEGALCN/03F4	*ERR:ILLEGALSYSALL/0409	*ERR:ILLFILESIZE/0400	*ERR:ILLLSN/040E
*ERR:INPUTTIMEDUT/042E	*ERR:IOINPROGRESS/0771	*ERR:LCNWNATALLOCATED/03FB	*ERR:MUSTBEDISK/0422
*ERR:NBPCTOBBIG/03ED	*ERR:NEWFILEEXISTS/03F6	*ERR:NLSNBE224/041B	*ERR:NODEBUGGER/03EB
*ERR:NODEFAULTPROGRAM/03F0	*ERR:NDDISKMAP/03EE	*ERR:NDDISKSPACE/03F7	*ERR:NOERRORMSGS/03FE
*ERR:NDFREEFCBS/03F9	*ERR:NDMATCHFCB/03EF	*ERR:NDNE/0000 *ERR:NDSUCHDEVICE/0420	*ERR:NDSUCHKEY/0433
*ERR:NDSUCHLUN/0426	*ERR:NDSUCHPROGRAM/0428	*ERR:NDTALOADFILE/0404	*ERR:NDTENOUGHPODL/0402
*ERR:NOTENDUGHRDDM/040D	*ERR:NDTENUFHEM/0069	*ERR:NDTIMEOUTBLKS/0431	*ERR:NOTDPENTOCNOSOLE/0423
*ERR:OLDFILEEXISTS/0429	*ERR:PRINTERNOTREADY/042D	*ERR:PROFILENOTFOUND/0777	*ERR:PROFILENOTMALLEABLE/0778
*ERR:PRDGRAMKILLED/0411	*ERR:PWRFAILDISKF/0403	*ERR:RDBUFTODSMALL/041E	*ERR:RENAMEDEVICE/040B
*ERR:SDDCKSUM/041A	*ERR:SDOSMTALREADYRUNNING/04CE	*ERR:SDOSMTPRIMSMISSING/04D0	*ERR:SDOSNOTREGISTERED/0436
*ERR:SECTORSIZE2/0413	*ERR:SELFTESTCKSUM/0430	*ERR:SERNALNDWRONG/0432	*ERR:STATUSHASCHANGED/04CF
*ERR:SYSCALLTDOSHORT/041D	*ERR:SYSTEMCROAKED/0414	*ERR:TIMEDINPUTEXPIRED/0776	*ERR:TINENOTSET/0425
*ERR:WARNINGCOMPILE/0065	*ERR:WRBUFTODSMALL/041F	*ERR:WRDNGDISKTYPE/076E	*ERR:WRONGFILESYSM/03FA
*ERR:ZERDSTARTADDRESS/0427	ERR:TX/BEE0 ERRDRRTS/0D39	EXORCISDR/0000 *FCB:DAY/0016	*FCB:DIRDISP/0005
*FCB:DIRLSN/0002	*FCB:DISKINFO/0000	*FCB:FILESIZE/0011	*FCB:FLAGS/000A *FCB:HCSIC/000E
*FCB:HLCN/000C *FCB:HLSN/0007	*FCB:MONTH/0017 *FCB:NCLUSTERS/000F	*FCB:PROT/0015	*FCB:REFCOUNT/000B
FCB:SIZE/001A *FCB:VERSION/0019	*FCB:YEAR/0018 *FCBS/99B9	FDCB/0051	FDCOMPLEMENT/004B
FDCDNTROL/855D FDCYL/0049	FDDISMOUNT/8564	FDDRIVE/0048 FDDRIVER/8551	FDDSTATE/0044 FDDSTATEJ/0043
FDFIRSTSEC/004C	FDHEADCHAIN/004D	FDK16MODNSPT/0059	FDK1MODNSPT/0055
FDK2MODNSPT/0056	*FDK32MODNSPT/005A	FDK4MODNSPT/0057	FDK8MODNSPT/0058
FDMAP/0058 FDMAPAL6/0053	FDNEXTCHAIN/004F	FDREAD/856D FDREAD.1/856E	FDREADWRITE/0042
FDRESTORE/9DE3 FDRETRY/0047	FDSECTOR/004A FDSEEKRETRY/0046	FDSETUP1/85CB FDSETUP2/860D	FDSETUP4/86B1
FDSETUPDRIVE/85AF	FDSize/005B FDSTARTIO/857A	FDSTATUS/8566 FDTIMEOUTBLOCK/9069	FDWAIT1/8598
FDWAIT2/859F FDWAITDONE/858F	FDWRITE/8569	*FILESYSMVERSION/0010	*GETCV/FC09
GOTOOUTPUT: *FFC0/8F24	GDTOUTPUT: *FFC4/8F51	GOTOOUTPUT: *FFC8/8F7E	IBHFORMAT/0001 *IC:CREATE/0000
*IC:DESTROY/0001	*IC:LOCK/0003 *IC:RELEASE/0004	*IC:RESET/0002	*IC:TEST/0005 *IGNORED/0000
ILGETDEV: *FFC0/8D1C	ILGETDEV: *FFC4/8D35	ILGETDEV: *FFC8/8DAE	ILGETDEVSTATUSFROMACIAERROR/BEA
ILGETDEVSTATUSFROMACIA/BEA2	ILLDEVICEBP/8EDB	ILPUTDEV: *FFC0/8D13	ILPUTDEV: *FFC4/8D2C
ILPUTDEV: *FFC8/8D45	IMI5007/0000 *IMI77105/0001	IMI7711/0000 INBUF: *FFC0/9416	INBUF: *FFC4/951A
INBUF: *FFC8/956A	INBUFSIZE: *FFC0/0050	INBUFSIZE: *FFC4/0000	INBUFSIZE: *FFC8/0050
*INICV/FC03 *INIDV/FC12	INPUTTOBLK: *FFC0/96D0	INPUTTOBLK: *FFC4/980C	INPUTTOBLK: *FFC8/994B
INTDISABLE/8EC4	*INTENABLE/8EC7 INTERRUPTSTACK/9D9D	INTERRUPTSTACKEND/9DE3	
INTERRUPTSTACKSIZE/0046	*INTERRUPTTARGET/BE15	*INTRTI/8ECA INTSETUP/9D9D	*IOCB:BUFFERP/0005
*IOCB:BYTECOUNT/0016	*IOCB:COLCNT/000C	*IOCB:CURBYTE/000D	*IOCB:CURLCN/0018
*IOCB:CURLSN/0002	*IOCB:DCB/0000 *IOCB:DRDSI/0012	*IOCB:DRIVER/0009	*IOCB:DRSN/001A
*IOCB:EOFFLAG/000B	*IOCB:FCB/0007 *IOCB:HRDSI/001F	*IOCB:HRSN/0021	*IOCB:LOCATEDF/0011
*IOCB:NEXTBYTE/0014	*IOCB:RBN/001D *IOCB:RDCN/001B	IOCB:SIZE/0022 IDCBPOINTERS/9D8D	IOCB:SIZE/9C7D
IDDRIVERBODY/0000	IDDRIVERINIT/0001	IDDRIVERPOLL/0000	IDDRIVERRAM/0000
IDPKDEFS/0001 *JUPITERII/0001	JWDCCMDFEED/8CA3	K/0400 LCN:SIZE/0002	LINEBUF: *FFC0/9466
LINEBUF: *FFC4/951A	LINEBUF: *FFC8/95BA	LINEBUFSIZE: *FFC0/0064	LINEBUFSIZE: *FFC4/0000
LINEBUFSIZE: *FFC8/0064	*LINEFLAGS/00F0 *LIST.VIRTUALFLOPPY/0001	*LISTCLOCK/0001	LISTDEFS/0000

MAL/6800 1.3F: 9E78 SDOSEDRIVERS
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*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Symbols Sorted by Name

*LISTSTORAGEDEMON/0001	LSN:SIZE/0003	M6800/0001	M6801/0000	M6809/0000	MAKEDISKREADY/876A
MAP1/8692	MAP2/8697	MAP3/869C	MAP4/86A1	MAP5/86A6	MEMSIZE/003C
MODULONSPTB/85A1	MONTH/8FF8	NDISKDCBS/0008	NDRIVES/0008	NEXTDEVICEDCB/8FEB	MINSTACK/0015
NEXTDPB/8DFB	NEXTTCB/0000	NEXTTIMEOUT/96C8	NIOCHANNELS/0008	NMAGICFCBS/0002	MODULONSPT/85A8
NOINT:\$FFC0/8F45	NOINT:\$FFC4/8F72	NOTDCDDROP:\$FFC8/8F92	NOTINPUT:\$FFC0/8F3F	NOTDCDDROP:\$FFC0/8F38	NEXTDISKDCB/9377
NOTDCDDROP:\$FFC4/8F65	NOTDCDDROP:\$FFC8/8F92	NOTOUTPUT:\$FFC0/8F2C	NOTOUTPUT:\$FFC4/8F59	NOTINPUT:\$FFC4/8F6C	
NOTINPUT:\$FFC8/8F99	NOTIMEOUTS/0009	OKRTS/0C39	OUTASPACE/0001	OUTBUF:\$FFC0/93C6	OUTBUF:\$FFC4/94CA
NTIMEOUTBLOCKS/0009	OUTBUF:\$FFC8/951A	OUTBUFSIZE:\$FFC0/0050	OUTBUFSIZE:\$FFC4/0050	OUTBUFSIZE:\$FFC8/0050	
OUTBUF:\$FFC8/951A	OUTPUTTOBLK:\$FFC4/9804	OUTPUTTOBLK:\$FFC8/9943	*PATCHSPACE/8EE6		
*OUTPUTTOBLK:\$FFC0/96C8	PERSCI/0002	PERSCI:ABORT/887B	PERSCI:ABORT.RTS/8890	PERSCI:ISSUECOMMAND/8875	PERSCI:PIACA/FFA0
PERSCI:PIACB/FFA1	PERSCI:PIADA/FFA2	PERSCI:PIADB/FFA3	PERSCI:READSECTOR/88B3		
PERSCI:READSECTOR.1/88CC	PERSCI:READSECTOR.2/88C1	PERSCI:RESET/8891	PERSCI:RESTORE/886C		
PERSCI:SEEK/8897	PERSCI:SETSEEK/8895	PERSCI:STATUS/8864	PERSCI:TIMEOUT/8976		
PERSCI:VERIFYSECTOR/88AC	PERSCI:WDCMDSTS/FFA4	PERSCI:WDDATA/FFA7	PERSCI:WDSECTOR/FFA6		
PERSCI:WDTRACK/FFA5	PERSCI:WRITESECTOR/88CF	PERSCI:WRITESECTOR.1/88EB	PERSCI:INTERRUPTMASK/8FC3		
*PROFILE.ADM3/0001	*PROFILE.EPSNLP/0001	*PROFILE.GT100/0001	*PROFILE.H19/0001		
*PROFILE.MALLPT/0001	*PROFILE.MALVT/0001	*PROFILE.RS232LPT/0001	*PROFILE.SDR0CTQ120/0001		
*PROFILECHAIN/8DFB	PROFILENUM.ADM3/0003	PROFILENUM.H19/0005	PROFILENUM.HARDCOPYVT/0006		
PROFILENUM.MALLPT/0009	PROFILENUM.MALVT/0001	PROFILENUM.RS232LPT/0008	*PROT::BACKUP/0001		
*PROT::WRITE/0040	*PUTCV/FC06	*PUTDV/FC15	RDSI:CYLINDER/0011		
*RDSI:DISKINFO/0000	*RDSI:FLINK/0007	RDSI:LSN/0002	*RDSI:MODIFIED/000B	RDSI:SECTOR/000D	
RDSI:SECTORBASE/0005	*RDSI:SIZE/0013	*RDSI:STATE/000C	*RDSI:TRACK/000F	*RDSI:STATE:IDLE/000	
*RDSI:STATE:READING/0001	*RDSI:STATE:VERIFYING/0003	*RDSI:STATE:WRITING/0002	*REALTIMECLOCK/0001		
*REG:A/0003	*REG:B/0002	*REG:CC/0001	*REG:PC/0006	*REG:X/0004	RESET:\$FFC0/9E4B
RESET:\$FFC8/9E69	RTI:\$FFC0/8F37	RTI:\$FFC4/8F64	RTI:\$FFC8/8F91	*RTS:\$FFC0/8D1B	*RTS:\$FFC4/8D34
*SC:ALLSTATUS/0033	*SC:ATTENTIONCK/0030	SC:DEVICESPECIFICOP/0010	*SC:GETACTCOL/0011	*RTS:\$FFC8/8D4D	
*SC:GETCOL/0001	*SC:GETDATA/0036	*SC:GETEOF/0002	*SC:GETERRORSTATS/0011	*SC:GETFILEDATE/0010	
*SC:GETFILEPROT/0011	*SC:GETFILESIZE/0003	*SC:GETFREECOUNT/0035	*SC:GETLASTBADLSN/0010	*SC:GETPOS/0000	*SC:GETPROFILE/0010
*SC:GETLINEFLAGS/002C	*SC:GETLINEFLAGSHINT/0034	*SC:GETPARAMS/0005	*SCBLK:DATA/000E		
*SC:GETTIMESHARE/0032	SC:GETTYPE/0004	*SC:STATUSCK/0031			
SCBLK:END/000E	SCBLK:OPCODE/0000	SCBLK:PARAMS/0002	SCBLK:RDBUF/000A	*SCBLK:RDLEN/000C	
SCBLK:RPLEN/0008	*SCBLK:WLEN/0001	SCBLK:WRBUF/0004	*SCBLK:WLEN/0006		
SDLP/0000	SDOS/BE00	*SDOS:BLOCKMOVE/0042	SDOS:CHECKRDLEN/0036	*SDOS:CHECKSCLEN/003C	
SDOS:CHECKWLEN/0039	SDOS:CLOCK/000B	SDOS:CLOCKTICKED/001B	*SDOS:CONFIGURATION/0003		
*SDOS:CURRENTHW/001E	*SDOS:DAY/000E	*SDOS:ENTRYSIZE/0045	SDOS:ERROR/002D	SDOS:ERRORRED/0033	
SDOS:ERRORSAVE/0030	SDOS:EXTENSIONSIZE/0048	SDOS:IOBLOCKPTR/0007	*SDOS:IOCBPINTER/0009		
SDOS:IOINT/0012	*SDOS:KILLPROOF/0020	*SDOS:KILLUSERPROGRAM/0021	*SDOS:LASTERROR/0001		
*SDOS:MONTH/000F	SDOS:RESCHEDULE/0018	SDOS:RTI/0015	*SDOS:SERIALNUMBER/0005		
*SDOS:STACKSWITCHED/0011	SDOS:STARTID/0024	*SDOS:TABLEBRANCH/003F	*SDOS:VERSIONNUMBER/0000		
SDOS:VTATTNCHECK/FFD3	SDOS:VTCLEARIN/FFB8	SDOS:VTCLEAROUT/FFBB	SDOS:VTDISPATCH/FFE2		
SDOS:VTEDITTASK/FFCA	SDOS:VTILGETBUF/FFC7	SDOS:VTILPUTBUF/FFC4	SDOS:VTINPUTINT/FFDC		
SDOS:VTINPUTTO/FFD6	*SDOS:VTINTDCB/FFFE	SDOS:VTMALLPT/FFCD	SDOS:VTMALVT/FFD0		
SDOS:VTOUTPUTINT/FFDF	SDOS:VTOUTPUTTO/FFD9	SDOS:VTTLGETBUF/FFC1	SDOS:VTTLPUTBUF/FFBE		
*SDOS:WAITCOND/0027	SDOS:WAITEVENT/002A	*SDOS:YEAR/0010	SDOSMT/0000	*SDOSVERSION/0011	
*SECTORDB:ADDRESS/0005	*SECTORDB:DISKINFO/0000	*SECTORDB:LSN/0002		*SECTORDB:SIZE/0007	
SEEK/86E5	SEEK3/8710	SEEK3.1/8718	SEEKDONE/86FE	SEEKHOMEJ/87BE	
SPECIALFN:CLEAR/0082	SPECIALFN:EEOL/0083	*SPECIALFN:NEWLINE/0080	SPECIALFN:POSN/0081		
SPECIALOUTPUT:ADM3/8DCF	SPECIALOUTPUT:ADM3CLEAR/8DF5	SPECIALOUTPUT:ADM3POSN/8DD9	SPECIALOUTPUT:H19/8E50		
SPECIALOUTPUT:H19CLEAR/8E7A	SPECIALOUTPUT:H19EEOL/8EB4	SPECIALOUTPUT:H19POSN/8E5E	STACK:\$FFC0/975D		
STACK:\$FFC4/9899	STACK:\$FFC8/99D8	STACKSWITCHEDDEVICEPOLL/8FA2	STACKUNSWITCHEDDEVICEPOLL/8F18		
STORAGEDEMON/0001	STORAGEDEMONVIA/FF40	*SYSCALL\$/00FB	SYSCALLID/8400	SYSDDEPENDENT/00F0	
SYSIIRQ/00FD	SYSPG/00FE	SYSTEMDEFS/0000	TASKQUEUE/9724	TCB:\$FFC0/9724	TCB:\$FFC4/9860
*TCB:COND/0004	*TCB:LNK/0000	*TCB:PARAM/0006	TCB:SCRATCHPAD/0008	TCB:SIZE/0010	TCB:\$FFC8/999F
TCBSTACK:\$FFC4/9892	TCBSTACK:\$FFC8/99D1	*TEMP/0000	*TEMPA/0000	*TEMPB/0001	TEMPX/0000

*TESTCV/FC0C	TESTFORSEEK/8B31	THISDPB/8DFB	TICKSPERSECOND/003C	TIME\$/9002	TIME\$:HOURS/9002
TIME\$:MINUTES/9005	TIME\$:SECONDS/9008		*TIMEOUT:DCB/0006	TIMEOUT:FUSE/0002	
*TIMEOUT:LINK/0000	*TIMEOUT:ROUTINE/0004		TIMEOUT:SIZE/0008	TIMEOUTQUEUE/96C8	
TLCHECKREADY:\$FFC0/8D25	TLCHECKREADY:\$FFC4/8D3E		TLCHECKREADY:\$FFC8/8D57	*TTYBUFFERS/93C6	
TTYDCB/9627	TTYTIMEOUTS/96C8		USECONSOLEACIAASCLOCK/0000	USEDEMONASCLOCK/0001	
VIAACR/FF4B	VIADDB/FF42	VIADRA/FF41	VIADRAF/FF4F	VIADRB/FF40	VIAIER/FF4E
VIAPCR/FF4C	VIAT1CH/FF45	*VIAT1LH/FF47	VIAT1LL/FF44	VIAT1LLA/FF46	VIAIFR/FF4D
*VT:INTERRUPTPOLLCHAIN/8F18	VTDRIVER/A600	WAITFORINTERRUPT/8B28	WAVEMATE/0001	WDCODCB/9377	WDCOSTR/93BB
WDC1DCB/932E	WDC1STR/9372			*WDCCMDFEED1/8A80	
WDCCONTINUEPC/9328	WDCCMDFEED/8A5C		WDCCMDFEED0/8A6A		WDCDONE/8B44
WDCDRIVE/0043	WDCCONTROL/89D0		WDCCOUNT/932A	WDCDCBPINTER/9326	WDCFORMAT/0001
WDCFORMATX/89DB	WDCFATAL/00B0	WDCFATAL0/8C8E	WDCFATAL2/8C94	WDCFATALERR/8C92	
WDCINDATA1/8C15	WDCFORMSERV/8B3B		WDCFORMSERVJ/8A56	WDCINDATA/8C07	WDCINDATA0/8C08
WDCINTUNEXPECTED/8C66	WDCINIT/9E2C	WDCINTERFACE/9325		WDCINTERRUPT/8C69	
WDCOUTDATA/8BE0	WDCNBPS/0200	WDCNCYL/0001	WDCNSPT/4E34	WDCNTPC/0001	WDCOKRTS/8A20
WDCPOLL1/8FB3	WDCOUTDATA1/8BF6		WDCOUTDATA/8BE9		WDCOPSET/89EB
WDCPOLLNEXT/8FBF		WDCPROCST/8CB4	WDCPROCSTOKRTS/8CB0	WDCPOINTER/9328	WDCQUIET1/8B31
WDCQUIT/8CD6		WDCQUITWITHERR/8CE8		WDCQUIET1/8B31	WDCQUIETERR/8B2F
WDCREAD2/8B7D	WDCREAD4/8B95	WDCREAD5/8BA1	WDCREAD6/8BAD	WDCREAD7/8B89	WDCREAD1/8B71
WDCREADD/8BCB	WDCREADSERV/8B4F		WDCREADSERVJ/8A59	WDCREADCMD/0002	
WDCREADWAITLOOP/8BD4	WDCREADSERV/8B5B				WDCREADWAIT/8BD3
WDCRETRY/0005	WDCREADWAITRTS/8BDF	WDCREADWRITE/0042		WDCRESET/8A36	WDCRESETLP/8A44
WDCSAVEWRITESTATUS1/8CCC	WDCSAVEREADSTATUS/8CCD	WDCSAVEREADSTATUS1/8CD5		WDCSETUP/8A02	WDCSAVESTATUS/8CA6
WDCSTARTIO/8A5C	WDCSET4TRANS/8D01	WDCSETRETRY1/89F1		WDCSETRETRY1/89F1	*WDCSIZE/0044
WDCWAITAVAILBLE/8C1E	WDCSETRETRY1/89F1	WDCSETRETRY1/89F1		WDCSETUP/8A02	
WDCWRITE/89E5	WDCWAIT4INT/8C3C	WDCWAIT4INT2/8C54		WDCTIMEOUTBLOCK/93C0	WDCWAIT4INT3/8C57
WDCWRITE7/8B0A	WDCWAIT1/8A2B	WDCWAIT4INT3/8C57			
WDCWRITECMD/0003	WDCWAITAVAILBLELOOP/8C21	WDCWAITDONE/8A22		WDCWAITRTS/8C1D	
WDCWRITEWAIT/8B24	WDCWRITE1/8AC2	WDCWRITE3/8ADA	WDCWRITE4/BAE6	WDCWRITES5/8AF2	WDCWRITE6/BAFE
WMDAMFLOPPY/0000	WDCWRITE2/8ACE	WDCWRITELOOP/8AAA		*WDCWRITESERV/8A95	
XLATEI:ADM3.B/8DCC	WDCWRITED/8B1A	WDCWRITEWAITEXIT/8B39		WDCWRITEWAITLOOP/8B26	
XLATEI:H19.ESCAPE/8E20	WDCWRITEWAIT1ST/8A9D	WDCWRITEWAITEXIT/8B39		XLATEI:ADM3/8DC0	
	WMFORMAT/0001	WMFORMAT/0001		XLATEI:H19.B/BE1D	
	WMPERSCI/0000	WMPERSCI/0000		YEAR/8FF9	
	XLATEI:ADM3.DONE/8DCD	XLATEI:H19/BE11			
	XLATEI:H19.OK/BE1E	*XLATEI:H1932/8E4C			

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Symbols Sorted by Value:

*** SDOSE I/D drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Symbols Sorted by Value

:DAMFLOPPY/0000	:DATA/0000	:FIRST/0000	:IBMFORMAT/0000	:PERSCI/0000
*ALTERPROFILE:CPLEN/0000	*ASCII:NULL/0000		BLACKHOLE/0000	*CC:POSITION/0000
*CHANGED/0000	*CNFG:DISKDCBS/0000	CONRAC/0000	DCB:DONEFLAG/0000	*DPB:PROFILE/0000
*DRIVER:DISKRESET/0000	*DRIVER:OPEN/0000		DVDAT:NBPS/0000	*DVDAT:WIDTH/0000
*DVTYP.FILE/0000	DVTYP:TYPE/0000		*ERR:NONE/0000	*EXORCISDR/0000
*IC:CREATE/0000	*IGNORED/0000	IMI5007/0000	IM17711/0000	*IOCB:DCB/0000
IODRIVERPDDL/0000	IODRIVERRAM/0000		INBUFSIZE:\$FFC4/0000	IODRIVERBODY/0000
M6809/0000	NEXTTCB/0000	*RDSI:DISKINFO/0000	LINEBUFSIZE:\$FFC4/0000	LISTDEFS/0000
SDLP/0000	*SDOS:VERSIONNUMBER/0000	SDOSMT/0000	*RDSI:STATE:IDLE/0000	M6801/0000
*TCB:LNK/0000	*TEMP/0000	TEMPA/0000	*SECTORDB:DISKINFO/0000	*SC:SETPQS/0000
WMDAMFLOPPY/0000	WMPERSCI/0000	WMSERIES2000/0000	*TIMEOUT:LINK/0000	*SCBLK:DPCODE/0000
:WMFORMAT/0001	*ALTERPROFILE:CPSEQ/0001	*ASCII:SDH/0001	*CC:DUMPBUFFERS/0001	SYSTEMDEFS/0000
DCB:LASTERRDR/0001	*DCBEDITFLAG:ESC/0001		*DCBEXCEPT:SEDT/0001	USECONSOLEACIASCLOCK/0000
*DCBILSW:ALPHALOCK/0001	*DCBWLFLAGS:REF/0001		*DPB:DVTYP/0001	*TCB:ADDR/0001
*DVTYP.DISK/0001	ENV:CC/0001	*ERR:ATTENTION/0001	IBMFORMAT/0001	CLOCK/0001
*IM17710S/0001	IODRIVERINIT/0001	IOPKDEFS/0001	*JUPITERII/0001	*DCBILSPL:PAGE/0001
*LISTSTORAGEDEMON/0001	M6800/0001	DUTASPACE/0001	*PROFILE.ADM3/0001	*DVTAT:DEPTH/0001
*PROFILE.GT100/0001	*PROFILE.H19/0001		*PROFILE.MALLPT/0001	*IC:DESTRDY/0001
*PROFILE.RS232LPT/0001	*PROFILE.SORDCIQ120/0001		PROFILENUM.MALVT/0001	*LISTCLOCK/0001
*RDSI:STATE:READING/0001	*REALTIMECLOCK/0001		*REG:CC/0001	*PROFILE.EPSONLPT/0001
*SDOS:LASTERRDR/0001	STORAGEDEMON/0001		*TEMPB/0001	*PROFILE.MALVT/0001
WAVEMATE/0001	WDCFORMAT/0001	WDCNCYL/0001	WMFORMAT/0001	*PRDT::BACKUP/0001
*CNFG:DEVIDCDBS/0002	DAMFLOPPY/0002	*DCBEDITFLAG:READB/0002	*DRIVENUMBER/0002	*SCBLK:WLEN/0001
*DCBREMINDERS:CTLS/0002	*DCBWLFLAGS:RETYPE/0002	*DPB:NEXT/0002	*DCBILSPL:FREEZE/0002	VIRTUALFLOPPY/0001
*DRIVER:DISKREAD/0002	*DVDAT:NSPC/0002	*DVDAT:NSPT/0002	*DVTYP.STAPE/0002	*ASCII:STX/0002
*ENV:B/0002	*FCB:DIRLSN/0002	*IC:RESET/0002	*IOCB:CURLSN/0002	*DCBILSW:CTLC/0002
PERSCI/0002	RDSI:LSN/0002	*RDSI:STATE:WRITING/0002	*REG:B/0002	*DRIVER:CLOSE/0002
*SECTORDB:LSN/0002	*TCB:STACK/0002	TIMEDUT:FUSE/0002	WDCREADCMD/0002	*DVTYP:STAPE/0002
CCB:TIMEOUT/0003	DCB:NAME/0003	*DVTYP.DTAPE/0003	*ENV:A/0003	LCN:SIZE/0002
PRDFILENUM.ADM3/0003	*RDSI:STATE:VERIFYING/0003	*REG:A/0003	*SC:GETFILESIZE/0003	NMAGICFCBS/0002
*SDOS:CONFIGURATION/0003	WDCWRITECMD/0003	*ASCII:EDT/0004	CCB:DRIVE/0004	*SCBLK:PARAMS/0002
*DCBEDITFLAG:WRAP/0004	*DCBILSPL:DISCARD/0004	*DCBILSW:OUTTD/0004	*CNFG:IOCBPINTERS/0004	*ASCII:ETX/0003
*DCBWLFLAGS:FLDW/0004	*DPB:DEFWIDTH/0004	*DPBFLAGS:WRAP/0004	*DRIVER:DISKWRITE/0004	LSN:SIZE/0003
*DRIVER:READA/0004	*DVDAT:NTPC/0004	DVTYP.CONSOLE/0004	*ENV:X/0004	*IC:RELEASE/0004
*REG:X/0004	SC:GETTYPE/0004	SCBLK:WRBUF/0004	*TCB:COND/0004	*TIMEOUT:ROUTINE/0004
*ALTERPROFILE:CPIDLES/0005	ASCII:ENQ/0005	CCB:CYL/0005	DCB:NEXTDCB/0005	*DPB:DEFDEPTH/0005
DVTYP.PRINTER/0005	*FCB:DIRDISP/0005		*IC:TEST/0005	PRDFILENUM.H19/000
RDSI:SECTORBASE/0005	*SC:GETPARAMS/0005		*SDOS:SERIALNUMBER/0005	*SECTORDB:ADDRESS/0005
WDCRETRY/0005	*DCBNUMBER/0006	*ALTERPROFILE:ROWDISP/0006	*ASCII:ACK/0006	CCB:LASTCYL/0006
*CNFG:NIDCHANNELS/0006	DCBPDINTER/0006	*DPB:FLAGS/0006	*DRIVER:DISKWAIT/0006	*DRIVER:WRITEA/0006
*DVDAT:NCYL/0006	*DVTYP.SERIALDUT/0006	ENV:P/0006	PRDFILENUM.HARDCOPYVT/0006	*REG:PC/0006
*SCBLK:WLEN/0006	*TCB:PARAM/0006	*TIMEDUT:DCB/0006	*ALTERPROFILE:CDLISP/0007	*ASCII:BEL/0007
*BOOT:PARAMSIZE/0007	CCB:STARTID/0007	*CNFG:DSKBUFFERPDDL/0007	CONTEXTBLDCK:SIZE/0007	
*DCB:DRIVER/0007	*DPB:OUTTD/0007	*DVTYP.SERIALIN/0007	*FCB:HLSN/0007	*IOCB:FCB/0007
SDOS:IOBLOCKPTR/0007	*SECTORDB:SIZE/0007	*ALTERPROFILE:CLLEN/0008	ASCII:BS/0008	*RDSI:FLINK/0007
*DCBEDITFLAG:PAGE/0008	*DCBILSPL:CTLS/0008	*DCBILSPL:CONTINUE/0008	*DCBREMINDERS:CTLD/0008	
*DCBWLFLAGS:FLDE/0008	*DPBFLAGS:AUTONL/0008	*DRIVER:DISKSTATUS/0008	*DRIVER:READB/0008	
*DVTYP.PAROUT/0008	ENV:SIZE/0008	NIDCHANNELS/0008	SCBLK:RPLEN/0008	
TCB:SCRATCHPAD/0008	TIMEDUT:SIZE/0008	*ALTERPROFILE:CLSEQ/0009	*ASCII:HT/0009	CCB:STATUS/0009
*CNFG:DSKPOOLSIZE/0009	*DCB:EDITFLAG/0009	DCB:SIZE/0009	*DPB:KLATEI/0009	DSKINFO:NBPS/0009
*DVTYP.PARIN/0009	*IOCB:DRIVER/0009	NTIMEOUTBLOCKS/0009	NTIMEOUTS/0009	
PROFILENUM.MALLPT/0009	*RDSI:BLINK/0009	*SDOS:IOCBPDINTER/0009	ASCII:LF/000A	*DCB:REMINDERS/000A
*DRIVER:DISKCONTROL/000A	*DRIVER:WRITEB/000A	*DVTYP.DUMMY/000A	*FCB:FLAGS/000A	SCBLK:RDBUF/000A

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IOJUPITER.ASM

*** SDDS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Symbols Sorted by Value

ASCII:VT/000B	*CNFG:ATTNCHECK/000B	*DCB:WELFLAGS/000B	DSKINFO:NSPT/000B	DVTYP:CLOCK/000B
*FCB:REFCOUNT/000B	*IOCB:EOFFLAG/000B	PROFILENUM.RS232LPT/000B	*RDSI:MODIFIED/000B	
SDDS:CLOCK/000B	ASCII:FF/000C	CCB:RESET/000C	*DCB:ILSW/000C	*OPB:TLPDEV/000C
*FCB:HLCN/000C	*IOCB:COLCNT/000C	*RDSI:STATE/000C	*SCBLK:RDLEN/000C	*DRIVER:CREATE/000C
*ALTERPROFILE:CLIDLES/000D	*ASCII:CR/000D	*CNFG:DEBUGGER/000D	*DCB:COLCT/000D	*DSKINFO:NTPC/000D
*IOCB:CURBYTE/000D	RDSI:SECTOR/000D	*ALTERPROFILE:EEDLLEN/000E	*ASCII:SD/000E	*DCB:CTLCCOUNT/000E
*DRIVER:RENAME/000E	*FCB:HCSIC/000E	*SCBLK:DATA/000E	SCBLK:END/000E	SDDS:DAY/000E
*ALTERPROFILE:EEDLSEQ/000F	*ASCII:SI/000F	CCB:ABORT/000F	*CNFG:DRIVERBASE/000F	*IOCB:LINEBUFPTR/000F
*OPB:SETCOLORING/000F	*DSKINFO:NCYL/000F	*FCB:NCLUSTERS/000F	*RDSI:TRACK/000F	
*SDDS:MONTH/000F	:SPT/0010	*ASCII:OLE/0010	CC:DEVICESPECIFICOP/0010	*CC:ECHO/0010
*CC:UNLOCKDISK/0010	*OCBEDITFLAGS:ACTIVATE/0010	*OCB:ILLFLGS:CTLV/0010	*DCBREMINDERS:RIP/0010	
*OPBFLAGS:HCEdit/0010	*DRIVER:DELETE/0010	*FILESYSTEMVERSION/0010	SC:DEVICESPECIFICOP/0010	
*SC:GETFILEDATE/0010	*SC:GETLASTBAOLSN/0010	*SC:GETPROFILE/0010	*SDDS:YEAR/0010	TCB:SIZE/0010
*ASCII:DC1/0011	CC:DISMOUNTDISK/0011	*CC:NBECHO/0011	*CC:SETFILEPRDT/0011	*CNFG:INTSETUP/0011
*DCB:ILSPL/0011	DSKINFO:NSPC/0011	*FCB:FILESIZE/0011	*IOCB:LOCATEDF/0011	
RDSI:CYLINDER/0011	*SC:GETACTCOL/0011	*SC:GETERRORSTATS/0011	*SC:SETFILEPRDT/0011	
*SDDS:STACKSWITCHED/0011	*SDDSVERSION/0011	*ASCII:DC2/0012	*CC:IDLES/0012	*CC:SETFILESIZE/0012
*CC:SETMAPALGORITHM/0012	CCB:RESTORE/0012	*OCB:ILLFLGS/0012	*DPB:SETBACKGROUND/0012	
*DRIVER:CONTROL/0012	*DSKINFO:MINALLOD/0012	*IOCB:RDSI/0012	SDDS:IDINT/0012	
*ALTERPROFILE:EEDIDLES/0013	*ASCII:OC3/0013	*CC:MULTISECTORREAD/0013	*CC:POSITIONTOEND/0013	*CC:TABS/0013
*CNFG:INTOISABLE/0013	OCB:OILQUIESCENT/0013	*RDSI:SIZE/0013	*ALTERPROFILE:SIZE/0014	*ASCII:DC4/0014
*CC:MULTISECTORWRITE/0014	*CC:SETACTBLOCK/0014	*OCB:SCB/0014	*DRIVER:STATUS/0014	
*DSKINFO:MIDALLOD/0014	*IOCB:NEXTBYTE/0014	ASCII:NAK/0015	*CC:CLRINPUT/0015	CC:FORMAT/0015
CCB:SETSEEK/0015	DPB:BPINIT/0015	ENV:MINSTACK/0015	*FCB:PRDT/0015	MINSTACK/0015
SDDS:RTI/0015	*ASCII:SYN/0016	*CC:CLROUTPUT/0016	*CC:WAITDONE/0016	*CNFG:INTENABLE/0016
*DRIVER:RESET/0016	DSKINFO:MAPALGORITHM/0016	*FCB:DAY/0016	*IOCB:BYTECOUNT/0016	*ASCII:ETB/0017
*CC:SETREADTIMEOUT/0017	*FCB:MONTH/0017	*ASCII:CAN/0018	*CC:SETPROFILE/0018	CCB:SEEK/0018
*DSKINFO:LOG2NBPS/0018	*FCB:YEAR/0018	*IOCB:CURLCN/0018	SDDS:RESCHEDULE/0018	*ASCII:EM/0019
*CC:ALTERPROFILE/0019	*CNFG:INTRTI/0019	*DSKINFO:NBPSM1/0019	*FCB:VERSION/0019	
*ASCII:SUB/001A	*CC:WRITEEDITLINE/001A	DRIVER:PFRESTART/001A	FCB:SIZE/001A	*IOCB:DRSN/001A
*CC:SETFILESIZE/001B	CCB:READSECTOR/001B	*DSKINFO:NLSN/001B	*IOCB:RDCN/001B	ASCII:ESC/001B
SDDS:CLOCKTICKED/001B	*ASCII:FS/001C	*CC:SETPARAMS/001C	*CNFG:INTERRUPTSTACK/001C	*ASCII:BS/001D
*CC:ACTIVATIONCK/001D	DPB:SIZE/001D	*IOCB:RBN/001D	*ASCII:RS/001E	*CC:WRAP/001E
*CNFG:IDINTPOLL/001E	*DSKINFO:NLCN/001E	*SDDS:CURRENTHAS/001E	*ASCII:US/001F	*CC:NOWRAP/001F
*IOCB:HRDSI/001F	*ASCII:SPACE/0020	*CC:COLORING/0020	*CNFG:TASKQUEUE/0020	
*OCBEDITFLAGS:INTD/0020	*OCB:ILLFLGS:CTLB/0020	*OCB:ILSPL:INTD/0020	*OCBREMINDERS:INTD/0020	
*OCB:WELFLAGS:ECHO/0020	*DSKINFO:NBPC/0020	*SDDS:KILLPROOF/0020	*CC:BACKGROUND/0021	
CCB:VERIFYSECTOR/0021	*IOCB:HRSN/0021	*SDDS:KILLUSERPROGRAM/0021	*CC:KILLPROOF/0022	
CNFG:TIMEOUTLIST/0022	*DSKINFO:RANDMAP/0022	IOCB:SIZE/0022	*CC:KILLEnable/0023	CCB:TIMEOUTBLK/002
*CNFG:VTFILES/0024	*DSKINFO:MAPLSN/0024	SDDS:STARTID/0024	*CNFG:VTOEBUS/0026	
*DCB:CALLERSCB/0026	*DSKINFO:DIRFCB/0027	*SDDS:WAITCOND/0027	*CNFG:MTPRIMS/0028	
DCB:PROFILE/0028	*DSKINFO:MAPFCB/0029	*CNFG:VTSIZE/002A	SDDS:WAITEVENT/002A	
DSKINFO:SECTORDB/002B	CCB:CURRENTOCB/002C	*SC:GETLINEFLAGS/002C	*DSKINFO:BADLSN/002D	
SDDS:ERROR/002D	*CCB:SIZE/002E	*CC:WRITEANOWAIT/0030	DSKINFO:SEEKERRCNT/0030	*SC:ATTENTIONCK/003
SDDS:ERRORSAVE/0030	*CC:SETTIMESHARE/0031	*SC:STATUSCK/0031	*CC:SETEXCEPTION/0032	
DSKINFO:SEEKERRSTS/0032	*SC:GETTIMESHARE/0032	*CC:WRITENOWAIT/0033	*SC:ALLSTATUS/0033	
SDDS:ERRORED/0033	DSKINFO:WRITEERRCNT/0034	*SC:GETLINEFLAGSHINT/0034	*SC:GETFREECOUNT/0035	
DSKINFO:WRITEERRSTS/0036	*SC:GETDATAACOUNT/0036	SDDS:CHECKRDLEN/0036	DSKINFO:READERRCNT/0038	
SDDS:CHECKWLEN/0039	DSKINFO:READERRSTS/003A	DSKINFO:OPSCOUNT/003C	MEMSIZE/003C	
*SDDS:CHECKSCLEN/003C	TICKSPERSECOND/003C	DCB:XLATESTATE/003D	DSKINFO:ERRLSN/003F	
*SDDS:TABLEBRANCH/003F	*OCBEDITFLAGS:HCEdit/0040	*OCB:ILLFLGS:CTLT/0040	*PRDT:WRITE/0040	
DSKINFO:SIZE/0042	FDREADWRITE/0042	*SDDS:BLOCKMOVE/0042	WOCREADWRITE/0042	
FDDSTATEJ/0043	WOCORIVE/0043	FDDSTATE/0044	*WDCSIZE/0044	
FDSEEKRETRY/0046	INTERRUPTSTACKSIZE/0046	*OCB:RINGINFETCH/0045	*SDDS:ENTRYSIZE/0045	
SDDS:EXTENSIONSIZE/0048	*OCB:RINGINSTORE/0049	FDCYL/0049	FDSECTOR/004A	*DCB:RINGINROOM/004B

FDCOMPLEMENT/004B	FDFIRSTSEC/004C	:CYL/004D	DCB:RINGINBASE/004D	FDHEADCHAIN/004D
*DCB:RINGINLEN/004F	FDNEXTCHAIN/004F	INBUFSIZE:\$FFC0/0050	INBUFSIZE:\$FFC8/0050	
OUTBUFSIZE:\$FFC0/0050	OUTBUFSIZE:\$FFC4/0050	OUTBUFSIZE:\$FFC8/0050	*DCB:RINGOUTFETCH/0051	
FDCCB/0051	*DCB:RINGOUTDATA/0053	FDMAPALG/0053	FDK1MODNSPT/0055	
FDK2MODNSPT/0056	*DCB:RINGOUTROOM/0057	FDK4MODNSPT/0057	FDK8MODNSPT/0058	
DCB:RINGOUTBASE/0059	FDK16MODNSPT/0059	*FDK32MODNSPT/005A	*DCB:RINGOUTLEN/005B	
FDMAP/005B	FDSIZE/005B	DCB:RINGOUTTHRESHOLD/005D	*DCB:LINEFLAGS/005F	
*DCB:TLDATA/0060	*DCB:ILDATA/0062	*DCB:TLRDOM/0064	*ERR:FATALCOMPILE/0064	
LINEBUFSIZE:\$FFC0/0064	LINEBUFSIZE:\$FFC8/0064	*ERR:WARNINGCOMPILE/0065	*DCB:LINEBUFCOUNT/0066	
*ERR:BADCMDFORMAT/0066	DCB:LINEBUF/0067	*ERR:CANTGOTD/0067	*ERR:ABNORMALSTOP/0068	
*DCB:DISPLAYWIDTH/0069	*ERR:NOTENUFMEM/0069	*DCB:DISPLAYDEPTH/006A	*DCB:ENDCOL/006B	
*DCB:CURLORST/006C	*DCB:RDW/006D	*DCB:CDL/006E	*DCB:READCDL/006F	
*DCB:RDWCT/0071	*DCB:READAERR/0072	*DCB:FIELDEND/0074	*DCB:CTCLKILL/0075	*DCB:COLDRING/0076
*DCB:BACKGRDUND/0078	*DCB:NEWSTATUS/0079	DCB:LINEBUFLN/007A	*DCB:ACTCDL/007B	
*DCB:ACTDISP/007C	DCB:TLBUFFER/007D	*ASCII:MASK/007F	*ASCII:RUBOUT/007F	
*DCB:ILROOM/0080	*DCBEDITFLAGS:KILLP/0080	*DCB:ILLFLGS:ESC/0080	*DCB:ILSW:HCFFREEZE/0080	
*SPECIALFN:NEWLINE/0080	WDFATAL/0080	SPECIALFN:POSN/0081	*DCB:EXCEPT/0082	
SPECIALFN:CLEAR/0082	*DCB:PROCESSID/0083	SPECIALFN:EEDL/0083	*DCB:OPENCOUNT/0085	
*DCB:CALLERIDCB/0086	*DCB:FIELDWIDTH/0088	*DCB:READPERIOD/0089	*DCB:PDSNSL/008B	
*DCB:POSN/008C	*DCB:PDSNIDLES/0090	*DCB:ROWDISP/0091	*DCB:COLDISP/0092	*DCB:CLEARSL/0093
*DCB:CLEAR/0094	*DCB:LEARIDLES/0098	*DCB:EEDLSL/0099	*DCB:EEOL/009A	*DCB:EEOLIDLES/009E
*DCB:IDLETRIGGER/009F	*DCB:IDLECDUNT/00A0	DCB:OUTPUTDBLK/00A1	DCB:INPUTDBLK/00A9	
DCB:TCB/00B1	DCB:TASKSTACK/00B3	DCB:RESET/00B5	*DCB:ILPUTDEV/00BB	
*DCB:ILGETDEV/00BE	*DCB:CDNTRDL/00C1	*DCB:STATUS/00C4	*DCB:ISDEVICEREADY/00C7	
DCB:CLEARIN/00CA	*DCB:CLEAROUT/00CD	*DCB:TLPUTBUF/00D0	*DCB:TLGETBUF/00D3	
*DCB:ILPUTBUF/00D6	*DCB:ILGETBUF/00D9	*DCB:TABS/00DC	*DCB:ACTIVATION/00ED	*BASICFLAGS/00F0
*LINEFLAGS/00F0	SYSDEPENDENT/00F0	*SYSCALL\$/00FB	DCB:VTSIZE/00FD	SYSIIRQ/00FD
:BPS/0100	WDCNBPS/0200	*ERR:BOOTCKSUMFAIL/03EB	*ERR:EOFHIT/03E9	*ERR:FILEISOPEN/03EA
*ERR:NDEBBUGGER/03EB	*ERR:BADPOSITIDN/03EC	*ERR:NBPCTO0B1G/03ED	*ERR:NDDISKMAP/03EE	*ERR:NDDISKMAP/03EE
*ERR:NOMATCHFCB/03EF	*ERR:NODEFAULTPROGRAM/03F0	*ERR:FILEWRTPROT/03F2	*ERR:FILENOTFUND/03F3	*ERR:FILENOTFUND/03F3
*ERR:ILLEGALLCN/03F4	*ERR:BADFNAMESIZE/03F5	*ERR:NEWFILEEXISTS/03F6	*ERR:NDDISKSPACE/03F7	*ERR:NDDISKSPACE/03F7
*ERR:LCNWNATALLDCATED/03F8	*ERR:NOFREEFCBS/03F9	*ERR:WRONGFILESYSYTEM/03FA	*ERR:FILEINCREATE/03FB	*ERR:FILEINCREATE/03FB
*ERR:DISKMOUNTED/03FC	*ERR:CANTOPENMUSTCREATE/03FD	*ERR:NOERRORMSGS/03FE	*ERR:BADFILENAME/03FF	*ERR:BADFILENAME/03FF
*ERR:ILLFILESIZE/0400	K/0400	*ERR:HCSICTDOSMALL/0401	*ERR:NOTENOUGHPOOL/0402	*ERR:NOTENOUGHPOOL/0402
*ERR:PWRFAILDISKF/0403	*ERR:NOTALOADFILE/0404	*ERR:BADFILEVERSIDN/0405	*ERR:CHT00B1G/0406	*ERR:CHT00B1G/0406
*ERR:CHBUSY/0407	*ERR:CLOSED/0408	*ERR:ILLEGALSYSYCALL/0409	ERR:ILLDEVICEOP/040A	ERR:ILLDEVICEOP/040A
*ERR:RENAMEDVICE/040B	*ERR:BADLOADRECORD/040C	*ERR:NOTENOUGHROOM/040D	*ERR:ILLLSN/040E	*ERR:ILLLSN/040E
*ERR:DIRECTORYDAMAGED/040F	*ERR:IBUFDVERFLOW/0410	*ERR:PRDGRAMKILLED/0411	ERR:DEVICETIMEDOUT/0412	ERR:DEVICETIMEDOUT/0412
*ERR:SECTORSIZE2/0413	*ERR:SYSTEMCROAKED/0414	ERR:DISKREAD/0415	ERR:DISKWRITE/0416	ERR:DISKWRITE/0416
ERR:DISKSEEK/0417	ERR:DSKWRTPROT/0418	*ERR:DISKWRITELOCKED/0419	*ERR:SDOSCKSUM/041A	*ERR:SDOSCKSUM/041A
*ERR:NLSNGE224/041B	*ERR:CLUSTERSIZELIMITSFILE/041C	*ERR:SYSYCALLTOOSHORT/041D	*ERR:RDBUFTOOSMALL/041E	*ERR:RDBUFTOOSMALL/041E
*ERR:WRBUFTDOSMALL/041F	*ERR:NOSUCHDEVICE/0420	*ERR:DEVICEERRORED/0421	*ERR:MUSTBEDISK/0422	*ERR:MUSTBEDISK/0422
*ERR:NOTOPENTOCDSOLE/0423	ERR:DEVICENDTREADY/0424	*ERR:TIMENOTSET/0425	*ERR:NDSUCHLUN/0426	*ERR:NDSUCHLUN/0426
*ERR:ZEROSTARTADDRESS/0427	*ERR:NOSUCHPROGRAM/0428	*ERR:OLDFILEEXISTS/0429	*ERR:ALLOCOCLUSTERS/042B	*ERR:ALLOCOCLUSTERS/042B
*ERR:FILEALREADYDELETED/042C	*ERR:PRINTERNOTREADY/042D	*ERR:INPUTTIMEOUT/042E	*ERR:ENDOFMEDIUM/042F	*ERR:ENDOFMEDIUM/042F
*ERR:SELFTESTCKSUM/0430	*ERR:NOTIMEOUTBLKS/0431	*ERR:SERIALNOWRONG/0432	*ERR:NOSUCHKEY/0433	*ERR:NOSUCHKEY/0433
*ERR:DUPLICATEKEY/0434	*ERR:BRANCHFACTORSIZE/0435	*ERR:SDOSNOTREGISTERED/0436	*ERR:DECRYPTIONKEYSDONTMATCH/0437	*ERR:DECRYPTIONKEYSDONTMATCH/0437
*ERR:SDOSMTALREADYRUNNING/04CE	*ERR:STATUSHASCHANGED/04CF	*ERR:SDSNTPRIMSHISSING/04D0	*ERR:WRONGDISKTYPE/076E	*ERR:WRONGDISKTYPE/076E
*ERR:IOINPROGRESS/0771	*ERR:BUSYFORANOTHERPROCESS/0772	*ERR:ACTIVATIONNOTINBUFFER/0773	*ERR:ACTIVATIONRECEIVED/0775	*ERR:ACTIVATIONRECEIVED/0775
*ERR:TIMEDINPUTEXPIRED/0776	*ERR:PROFILENOTFOUND/0777	*ERR:PROFILENOTMALLEABLE/0778	DESIREDPOOLSIZE/0800	DESIREDPOOLSIZE/0800
DSKPOOLSIZE/081D	DKRTS/0C39	ERRDKRTS/0D39	EDITDATE/1231	EDITYEAR/1982
DRIVERBASE/8400	SYSYCALLIO/8400	DEBUGSYSYCALLHANDLER/8407	DEBUGINTERRUPT/8410	DEBUGINTERRUPT/8410
CLOCKCLOSE/842F	CLOCKOPEN/842F	CLOCKPFRESTART/842F	CLOCKSPRUNG/8431	CLOCKSPRUNG/8431
CLOCKWRITB/844B	CLOCKWB1/8451	CLOCKWB2/845F	CLOCKREADB/8469	CLOCKREADB/8469
CLOCKREADA/848D	CLOCKRA1/84A6	CLOCKGETTD/84B9	CLOCKRB1/8475	CLOCKRB1/8475
			CLOCKRB2/848A	CLOCKRB2/848A
			CLOCKGETTD2/84CD	CLOCKGETTD2/84CD

*DATE/84D5	CLOCKDATE/84D7	BCDTASC/84FE	CLOCKTIME/850A	CLOCKMAKEXX/8522	DIVIDE8Y60/852E		
DIVIDE60L/8531	DIVIDE60L2/853A		DIVIDE60L3/8549	FDDRIVER/8551	FDCNTRL/855D	FDDISMOUNT/8564	
FDSTATUS/8566	FDWRITE/8569	FDREAD/856D	FDREAD.1/856E	FDSTARTIO/857A	FDWAITDONE/858F	FDWAIT1/8598	
FDWAIT2/859F	MODULDNSPTB/85A1		MODULDNSPT/85A8	FDSETUPDRIVE/85AF		FDSETUP1/85CB	
*BUILDMAP/85CF	BUILDMAP1/85D4	BUILDMAP2/85D8	BUILDMAP3/85DD	BUILDMAP4/85E9	FDSETUP2/860D	MAP1/8692	MAP2/8697
MAP3/869C	MAP4/86A1	MAP5/86A6	FDSETUP4/86B1	DISKINTERRUPT/86B5		DISKINTSETUP/86B9	
DISKINTSTARTPERSCI/86C2		DISKINTSTARTDAMFLDPY/86C7	DISKINTSTART/86CA		SEEK/86E5	SEEKDONE/86FE	
SEEK3/8710	SEEK3.1/8718	SEEKHOME/8720	DISKSEEKERRDR/8735	DISKWPERR/8738	DISKERRDR/8741	DISKERRDR1/874D	
DISKDONE/8751	DISKDONE1/8758	DISKINTUNEXPECTED/875E	CHECKDISKREADY/8762		MAKEDISKREADY/876A		
DISKABORT/876F	DISKSETCYLADD/8774		DISKSETCYLADD.1/8776	DISKWRITE/8780	DISKWRITE2/8791		
SEEKDONEJ/87A0	DISKWRITE3/87A3		DISKWRITE4/87A7	DISKWRITE5/87B1		SEEKHOMEJ/87BE	
DISKERRORJ/87C1		DISKSAVEERRLSN/87C4		DISKREAD/87D4	DISKREAD1/87E1	DISKDONEJ1/87E5	
DISKDDNEJ/87EC	DISKREAD4/87EF	DISKCOMPLEMENT/87F8		DISKCOMPL/8804	COUNTCOMMAND/881B		
WAITFDRINTERRUPT/8828		TESTFORSEEK/8831		CDPYDC8TOCC8/8845	DDSEEK/885D	PERSCI:STATUS/8864	
PERSCI:RESTORE/886C		PERSCI:ISSUECDMMAND/8875		PERSCI:ABORT/887B	PERSCI:ABORT.RTS/8890		
PERSCI:RESET/8891		PERSCI:SETSEEK/8895		PERSCI:SEEK/8897	PERSCI:VERIFYSECTOR/88AC		
PERSCI:READSECTOR/88B3		PERSCI:READSECTOR.2/88C1		PERSCI:READSECTOR.1/88CC	PERSCI:WRITESECTOR/88CF		
PERSCI:WRITESECTOR.1/88E8		DAMFLOPPY:STATUS/88EB		DAMFLOPPY:RESTORE/88F2	DAMFLOPPY:ISSUECDMMAND/88F9		
DAMFLOPPY:ABORT/88FF		DAMFLOPPY:ABORT.RTS/8913		DAMFLOPPY:RESET/8914	DAMFLOPPY:SETSEEK/8918		
DAMFLOPPY:SEEK/8918		DAMFLOPPY:VERIFYSECTOR/892E		DAMFLOPPY:READSECTOR/8938	DAMFLOPPY:READSECTOR.2/8945		
DAMFLOPPY:READSECTOR.1/894F		DAMFLOPPY:WRITESECTOR/8952		DAMFLOPPY:WRITESECTOR.2/8965	DAMFLOPPY:WRITESECTOR.1/8973		
PERSCI:TIMEOUT/8976		DAMFLOPPY:TIMEDUT/8978		DISKTIMEDUT/897E	DISKTIMEDOUTERRORED/8994		
DISKTIMEDUT1/89A9		DISKTIMEDUT1A/89B6		DISKTIMEDUT2/89C1	WDCDRIVER/89C4	WDCCONTROL/89D0	
WDCFORMATX/89D8		WDCWRITE/89E5	WDCREAD/89E9	WDCDPSET/89EB	WDCSETRETRY1/89F1	WDCSETUP/8A02	
WDCOKRTS/8A20	WDCWAITDONE/8A22		WDCWAIT1/8A28	WDCRESET/8A36	WDCRESETLP/8A44	WDCFORMSERVJ/8A56	
WDCREADSERVJ/8A59		WDCMDFEED/8A5C		WDCSTARTIO/8A5C		WDCMDFEED0/8A6A	
*WDCMDFEED1/8A80		*WDCWRITESERV/8A95		WDCWRITEWAIT1ST/8A9D		WDCWRITELODP/8AAA	
WDCWRITE0/8AB6	WDCWRITE1/8AC2	WDCWRITE2/8ACE	WDCWRITE3/8ADA	WDCWRITE4/8AE6	WDCWRITES/8AF2	WDCWRITE6/8AFE	WDCWRITE7/8B0A
WDCWRITED/8B1A	WDCWRITEWAIT/8B24		WDCWRITEWAITLOOP/8B26		WDCQUIETERR/8B2F		WDCQUIET1/8B31
WDCWRITEWAITEXIT/8B39		WDCFORMSERV/8B38		WDCDONE/8B44	WDCREADSERV/8B4F		WDCREADLOOP/8B58
WDCREAD0/8B65	WDCREAD1/8B71	WDCREAD2/8B7D	WDCREAD3/8B89	WDCREAD4/8B95	WDCREAD5/8BA1	WDCREAD6/8BAD	WDCREAD7/8BB9
WDCREADD/8BC8	WDCREADWAIT/8BD3		WDCREADWAITLODP/8BD4		WDCREADWAITRTS/8BDF		WDCOUTDATA/8BE0
WDCOUTDATA/8BE9		WDCOUTDATA1/8BF6		WDCINDATA/8C07	WDCINDATA0/8C08		WDCINDATA1/8C15
WDCWAITRTS/8C1D		WDCWAITAVAILABLE/8C1E		WDCWAITAVAILABLELODP/8C21	WDCWAIT4INT/8C3C		
WDCWAIT4INT2/8C54		WDCWAIT4INT3/8C57		WDCINTUNEXPECTED/8C66	WDCINTERRUPT/8C69		
WDCPRDST/8C84	WDCPRDSTKRTS/8C8D		WDCFATAL0/8C8E	WDCFATALERR/8C92	WDCFATAL2/8C94	JWDCMDFEED/8CA3	
WDCSAVESTATUS/8CA6		WDCSAVEWRITESTATUS1/8CCC		WDCSAVEREADSTATUS/8CCD	WDCSAVEREADSTATUS1/8CD5		
WDCQUIT/8CD6	WDCQUITREAD/8CE4		WDCQUITWITHERR/8CE8		WDCTIMEDOUT/8CF2	WDCTIMEDOUT1/8CF2	
WDCSET4TRANS/8D01		ILPUTDEV:\$FFC0/8D13		*RTS:\$FFC0/8D18	ILGETDEV:\$FFC0/8D1C		
TLCHECKREADY:\$FFC0/8D25		ILPUTDEV:\$FFC4/8D2C		*RTS:\$FFC4/8D34	ILGETDEV:\$FFC4/8D35		
TLCHECKREADY:\$FFC4/8D3E		ILPUTDEV:\$FFC8/8D45		*RTS:\$FFC8/8D4D	ILGETDEV:\$FFC8/8D4E		
TLCHECKREADY:\$FFC8/8D57		XLATEI:ADM3/8DC0		XLATEI:ADM3.B/8DCC	XLATEI:ADM3.DONE/8DCD		
SPECIALOUTPUT:ADM3/8DCF		SPECIALOUTPUT:ADM3PSDN/8DD9		SPECIALOUTPUT:ADM3CLEAR/8DF5	NEXTDPB/8DFB	*PROFILECHAIN/8DF8	
THISDPB/8DFB	XLATEI:H19/8E11		XLATEI:H19.B/8E1D		XLATEI:H19.OK/8E1E		
XLATEI:H19.ESCAPE/8E20		*XLATEI:H1932/8E4C		SPECIALOUTPUT:H19/8E50	SPECIALOUTPUT:H19PSDN/8E5E		
SPECIALOUTPUT:H19CLEAR/8E7A		SPECIALOUTPUT:H19EEDL/8E84		COLORING:H19/8E8E	COLORING:H19REVERSEVIDE0/8E9A		
ILGETDEVSTATUSFROMACIA/8EA2		ILGETDEVICESTATUSFROMACIAERROR/8EAB		CNFGTABLE/8EB1	INTDISABLE/8EC4		
*INTENABLE/8EC7	*INTRTI/8ECA	ILLDEVICEDP/8ED8		ERRTX/8EE0	*PATCHSPACE/8EE6		
STACKUNSWITCHEDDEVICEPOLL/8F18	*VT:INTERRUPTDLLCHAIN/8F18			BDTOUTPUT:\$FFC0/8F24	NDTOUTPUT:\$FFC0/8F2C		
RTI:\$FFC0/8F37	NDTDCDDROP:\$FFC0/8F38		NOTINPUT:\$FFC0/8F3F		NDINT:\$FFC0/8F45		
BDTOUTPUT:\$FFC4/8F51		NDTOUTPUT:\$FFC4/8F59		RTI:\$FFC4/8F64	NDTDCDDROP:\$FFC4/8F65	NDTINPUT:\$FFC4/8F6	
NDINT:\$FFC4/8F72		BDTOUTPUT:\$FFC8/8F7E		NDTOUTPUT:\$FFC8/8F86		RTI:\$FFC8/8F91	
NDTDCDDROP:\$FFC8/8F92		NDTINPUT:\$FFC8/8F99		NDINT:\$FFC8/8F9F		STACKSWITCHEDDEVICEPOLL/8FA2	
WDCPOLL1/8FB3	*DISKINTSERVICE/8FBF		WDCPOLLNEXT/8FBF		PERSCIINTERRUPTMASK/8FC3		
DISKINTPERSCI.NO/8FCF		DAMFLOPPYINTERRUPTMASK/8FD3		DISKINTDAMFLDPY.NO/8FDF		BADINTERRUPTCUNT/8FE9	

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*** SDOSE I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Symbols Sorted by Value

CLOCKOCB/BFEB	*DEVICEDCB/BFEB	NEXTDEVICEDCB/BFEB	CLOCKBUFFER/BFF4	DIV60DIVIDEND/BFF4
DAY/BFF7	MONTH/BFF8	YEAR/BFF9	*CLCKFRACTIDN/BFFA	CLOCKSTR/BFFB
TIME#:MINUTES/9005	TIME#:SECONDS/9008	DATE#/900B	DATE#:MONTH/900B	TIME#/9002
DATE#:YEAR/9011	DISKINTOCB/9013	DISKINTCCB/9015	:CDNTROLLER/9017	TIME#:HDURS/9002
CCB:PERSCI/9017	CCB:DAMFLDPY/9045	FDTIMEOUTBLDCK/9069	:HEADCHAIN/9155	DATE#:DAY/900E
:DCB/9286	::/9321	WOCINTERFACE/9325	WDCDCBPINTER/9326	WDCCONTINUEPC/9328
WDCCOUNT/932A	WDCPINTER/932B	WOCRETRYCNT/932D	WDC1DCB/932E	WOC1STR/9372
NEXTDISKDCB/9377	WDC0DCB/9377	WDC0STR/93BB	WDCTIMEOUTBLOCK/93C0	DISKDCBS/9377
DUTBUF:\$FFC0/93C6	*TTYBUFFERS/93C6	INBUF:\$FFC0/9416	LINEBUF:\$FFC0/9466	WOCIMEDUTCUNT/93C2
DUTBUF:\$FFC4/94CA	INBUF:\$FFC4/951A	LINEBUF:\$FFC4/951A	DUTBUF:\$FFC8/951A	LINEBUF:\$FFC0/9466
INBUF:\$FFC8/956A	LINEBUF:\$FFC8/95BA	DCBNAME:\$FFC0/961E	OCB:\$FFC0/9627	TTYDCB/9627
NEXTTIMEOUT/96C8	*OUTPUTDBLK:\$FFC0/96C8	TIMEDUTQUEUE/96C8	TTYTIMEOUTS/96C8	TTYTIMEOUTS/96C8
INPUTTOBLK:\$FFC0/96D0	TASKQUEUE/9724	TCB:\$FFC0/9724	TTYTCB/9724	TCBSTACK:\$FFC0/9756
DCBNAME:\$FFC4/975E	OCB:\$FFC4/9763	OUTPUTTOBLK:\$FFC4/9804	INPUTTOBLK:\$FFC4/980C	STACK:\$FFC0/975D
TCBSTACK:\$FFC4/9892	STACK:\$FFC4/9899	DCBNAME:\$FFC8/989A	DCB:\$FFC8/98A2	TCB:\$FFC4/9860
OUTPUTTOBLK:\$FFC8/9943	INPUTTOBLK:\$FFC8/994B	TCB:\$FFC8/999F	TCBSTACK:\$FFC8/99D1	STACK:\$FFC8/99D8
*FCBS/99D9	IDCBS/9C7D	IOCBPINTER/908D	INTERRUPTSTACK/909D	INTSETUP/9D9D
FDRESTORE/9DE3	INTERRUPTSTACKEND/9DE3	WDCINIT/9E2C	CLCKRESET/9E35	RESET:\$FFC0/9E4B
RESET:\$FFC4/9E5A	RESET:\$FFC8/9E69	VTDRIVER/A600	SDOS/8E00	*INTERRUPTTARGET/BE15
*INICV/FC03	*PUTCV/FC06	*GETCV/FC09	*TESTCV/FC0C	STORAGEDEMONVIA/FF40
VIADRB/FF40	VIADRA/FF41	VIADORB/FF42	VIADORA/FF43	VIAT1LL/FF44
VIACR/FF4B	VIAPCR/FF4C	VIAIFR/FF4D	VIAIER/FF4E	VIAT1CH/FF45
DAMFLOPPY:PIACB/FFB1	DAMFLDPY:PIADA/FFB2	DAMFLDPY:PIAOB/FFB3	DAMFLOPPY:WDDATA/FFB7	VIAT1LLA/FF46
DAMFLOPPY:WDTRACK/FFB5	DAMFLOPPY:WDSECTOR/FFB6	DAMFLOPPY:PIAOB/FFB3	DAMFLOPPY:WDDATA/FFB7	*VIAT1LH/FF47
PERSCI:PIACB/FFA1	PERSCI:PIADA/FFA2	PERSCI:PIAOB/FFA3	PERSCI:WDDATA/FFA7	DAMFLDPY:WDCNDSTS/FFB4
PERSCI:WDTRACK/FFA5	PERSCI:WSECTOR/FFA6	PERSCI:WDDATA/FFA7	SDOS:VTCLEARIN/FFB8	PERSCI:PIACA/FFA0
SDOS:VTCLEAROUT/FFB8	SDOS:VTTLPUTBUF/FFBE	SDOS:VTTLGETBUF/FFC1	SDOS:VTILPUTBUF/FFC4	PERSCI:WDCNDSTS/FFA4
SDOS:VTILGETBUF/FFC7	SDOS:VTEDITTASK/FFCA	SDOS:VTMALLPT/FFCD	SDOS:VTMALVT/FFD0	SDOS:VTCLEARIN/FFB8
SDOS:VTATTNCHECK/FFD3	SDOS:VTINPUTTO/FFD6	SDOS:VTOUTPUTTD/FFD9	SDOS:VTINPUTINT/FFDC	SDOS:VTILPUTBUF/FFC4
SDOS:VTOUTPUTINT/FFDF	SDOS:VTDISPATCH/FFE2	*SDOS:VTINTDCB/FFFE		SDOS:VTMALVT/FFD0

1170 Symbols.

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*** SDOS I/O drivers for WaveMate Jupiter II (C) 1978 SOFTWARE DYNAMICS ***
Symbols Sorted by Value

*** No Errors.